SHARP

Operation Guide

**BEFORE USING THE MACHINE**

PRINTING

SYSTEM SETTINGS

TROUBLESHOOTING

MANUALS PROVIDED WITH THE MACHINE

Operation manuals in PDF format (this manual)

The manuals in PDF format provide detailed explanations of the procedures for using the machine in each mode. To view the PDF manuals, download them from the hard drive in the machine. The procedure for downloading the manuals is explained in "Downloading the Operation Guide" in the Quick Start Guide.

1. BEFORE USING THE MACHINE

This chapter provides information, such as basic operation procedures and how to load paper.

2. PRINTING

This chapter provides detailed explanations of the procedures for printing.

3. SYSTEM SETTINGS

This chapter explains the "System Settings", which are used to configure a variety of parameters to suit the aims and the needs of your workplace. Current settings can be displayed or printed out from the "System Settings".

4. TROUBLESHOOTING

This chapter explains how to remove paper misfeeds and provides answers to frequently asked questions regarding the operation of the machine in each mode. Refer to this manual when you have difficulty using the machine.

Printed manuals

Manual name	Contents
Safety Guide	This manual contains instructions for using the machine safely and lists the specifications of the machine and its peripheral devices.
Software Setup Guide	This manual explains how to install the software and configure settings to use the machine.
Quick Start Guide	This manual provides easy-to-understand explanations of all the functions of the machine in a single volume. Detailed explanations of each of the functions can be found in the manuals in PDF format.

ABOUT OPERATION MANUAL

This manual explains how to use the MX-C400P digital full color printer.

Please note

- For information on installing the drivers and software cited in this manual, please refer to the Software Setup Guide.
- For information on your operating system, please refer to your operating system manual or the online Help function.
- The explanations of screens and procedures in a Windows environment are primarily for Windows Vista®. The screens may vary depending on the version of the operating system or the software application.
- The explanations of screens and procedures in a Macintosh environment are based on Mac OS X v10.4 in the case of Mac OS X. The screens may vary depending on the version of the operating system or the software application.
- Wherever "MX-xxxx" appears in this manual, please substitute your model name for "xxxx".
- Considerable care has been taken in preparing this manual. If you have any comments or concerns about the manual, please contact your dealer or nearest SHARP Service Department.
- This product has undergone strict quality control and inspection procedures. In the unlikely event that a defect or other problem is discovered, please contact your dealer or nearest SHARP Service Department.
- Aside from instances provided for by law, SHARP is not responsible for failures occurring during the use of the product or its options, or failures due to incorrect operation of the product and its options, or other failures, or for any damage that occurs due to use of the product.

Warning

- Reproduction, adaptation or translation of the contents of the manual without prior written permission is prohibited, except as allowed under copyright laws.
- All information in this manual is subject to change without notice.

Illustrations and the operation panel and display shown in this manual

The peripheral devices are generally optional, however, some models include certain peripheral devices as standard equipment.
The explanations in this manual assume that 500-sheet paper feed units (total of four trays) are installed on the MX-C400P.
For some functions and procedures, the explanations assume that devices other than the above are installed.

The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.

Icons used in the manuals

The icons in the manuals indicate the following types of information:

⚠ **Warning**	This alerts you to a situation where there is a risk of human death or injury.
⚠ **Caution**	This alerts you to a situation where there is a risk of human injury or property damage.

ⓘ	This alerts you to a situation where there is a risk of machine damage or failure.	⚙	This indicates the name of a system setting and provides a brief explanation of the setting. **When "System Settings:" appears:** A general setting is explained. **When "System Settings (Administrator):" appears:** A setting that can only be configured by an administrator is explained.
✎	This provides a supplemental explanation of a function or procedure.		
↩	This explains how to cancel or correct an operation.		

CHAPTER 1
BEFORE USING THE MACHINE

This chapter provides information on basic operation procedures, how to load paper and machine maintenance.

BEFORE USING THE MACHINE

LOADING PAPER

PERIPHERAL DEVICES

MAINTENANCE

ENTERING TEXT

BEFORE USING THE MACHINE

This section provides basic information about the machine. Please read this chapter before using the machine.

PART NAMES AND FUNCTIONS

EXTERIOR

When a finisher is installed
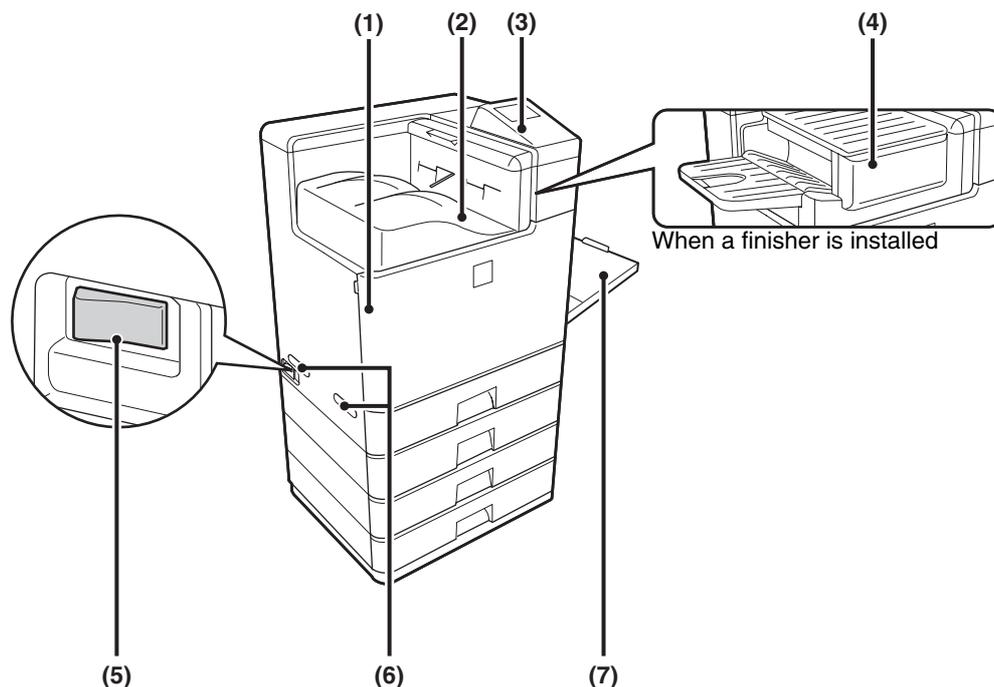
(1) **Front cover**

Open this cover to replace a toner cartridge.
☞ REPLACING THE TONER CARTRIDGES (page 1-49)

(2) **Output tray (center tray)**

Output is delivered to this tray.

(3) **Operation panel**

This is used to select functions.
☞ OPERATION PANEL (page 1-7)

(4) **Finisher***

This can be used to staple output.
☞ FINISHER (page 1-46)

(5) **Main power switch**

This is used to power on the machine.
☞ TURNING THE POWER ON AND OFF (page 1-13)

(6) **Handle**

Grasp it when moving the machine.

> ⚠ **Caution**
>
> **The main unit is extremely heavy, and thus two people are required to do the work. When lifting the main unit, grasp the handles on each side firmly.**

(7) **Bypass tray**

Use this tray to feed paper manually.
When loading paper larger than 8-1/2" x 11" or A4, be sure to pull out the bypass tray extension.
☞ LOADING PAPER IN THE BYPASS TRAY (page 1-42)

* Peripheral device.

1-3

(8)   **(9)**   **(10)**
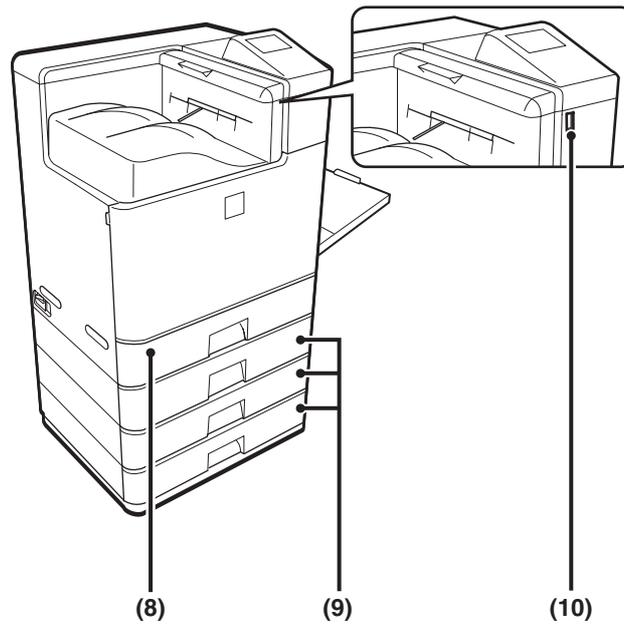
(8) Tray 1

This holds paper.
☞ TRAY SETTINGS FOR TRAYS 1 TO 4 (page 1-40)

(9) Tray 2/Tray 3/Tray 4
(when 500-sheet paper feed units are installed)*

These hold paper.
For 500-sheet paper feed unit combinations, consult your dealer or nearest SHARP Service Department.
☞ TRAY SETTINGS FOR TRAYS 1 TO 4 (page 1-40)

* Peripheral device.

(10) USB connector (A type)

Supports USB 2.0 (Hi-Speed).
This is used to connect a USB device such as USB memory to the machine.
For the USB cable, use a shielded cable.

INTERIOR
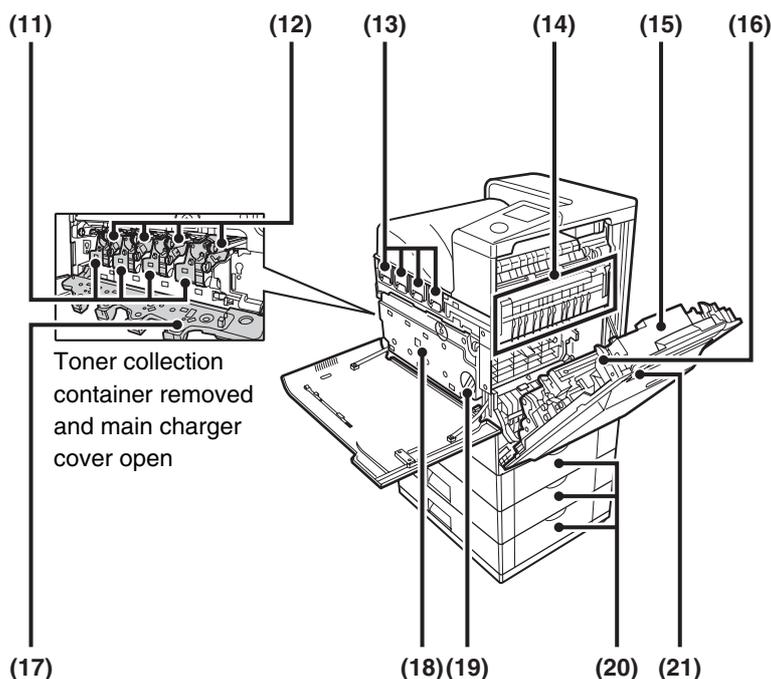
(11) Developer cartridges
This contains the developer that is necessary to transfer the toner to the paper.
When replacing the drum cartridge, the developer cartridge must be removed before the drum cartridge is replaced.
☞REPLACING THE DEVELOPER CARTRIDGE (page 1-55)

(12) Drum cartridges
This contains the photosensitive drum that is used to create images for printing.
☞REPLACING THE DRUM CARTRIDGE (page 1-60)

(13) Toner cartridges
These contain toner for printing. When the toner runs out in a cartridge, the cartridge of the color that ran out must be replaced.
☞REPLACING THE TONER CARTRIDGES (page 1-49)

(14) Fusing unit
Heat is applied here to fuse the transferred image onto the paper.

⚠ **Caution**

The fusing unit is hot. Take care not to burn yourself when removing a paper misfeed.

(15) Right side cover
Open this cover to remove a misfeed.
☞4. TROUBLESHOOTING "REMOVING MISFEEDS" (page 4-2)

(16) Paper reversing section
This is used when 2-sided printing is performed. Open this part to remove a paper misfeed.
☞4. TROUBLESHOOTING "REMOVING MISFEEDS" (page 4-2)

(17) Main charger cover
Open this cover to clean the main charger.
☞CLEANING THE MAIN CHARGER OF THE PHOTOCONDUCTIVE DRUM (page 1-64)

(18) Toner collection container
This collects excess toner that remains after printing.
☞REPLACING THE TONER COLLECTION CONTAINER (page 1-52)

📝 Your service technician will collect the toner collection container.

(19) Toner collection container release lever
Turn this lever when you need to release the toner collection container lock to replace the toner collection container or clean the laser unit.
☞REPLACING THE TONER COLLECTION CONTAINER (page 1-52)

(20) Paper tray right side cover
Open this to remove a paper misfeed in trays.
☞4. TROUBLESHOOTING "REMOVING MISFEEDS" (page 4-2)

(21) Right side cover release lever
To remove a paper misfeed, pull and hold this lever up to open the right side cover.
☞4. TROUBLESHOOTING "REMOVING MISFEEDS" (page 4-2)

1-5

SIDE AND BACK
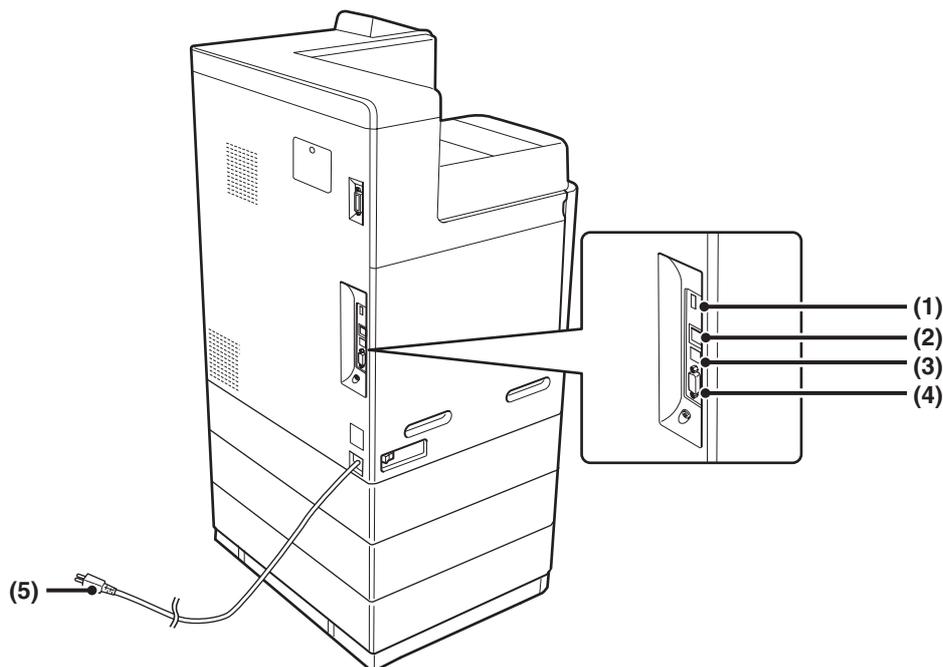
(1)   USB connector (A type)

Supports USB 2.0 (Hi-Speed).
This is used to connect a USB device such as USB memory to the machine.
This connector is not initially available for use. If you wish to use the connector, contact your service assistance.

(2)   LAN connector

Connect the LAN cable to this connector when the machine is used on a network.
For the LAN cable, use a shielded type cable.

(3)   USB connector (B type)

Supports USB 2.0 (Hi-Speed).
A computer can be connected to this connector to use the machine as a printer.
For the USB cable, use a shielded cable.

**(4)   Service-only connector**

⚠ **Caution**

This connector is for use only by service technicians.
Connecting a cable to this connector may cause the machine to malfunction.

Important note for service technicians:
The cable connected to the service connector must be less than 118" (3 m) in length.

(5)   Power plug

OPERATION PANEL
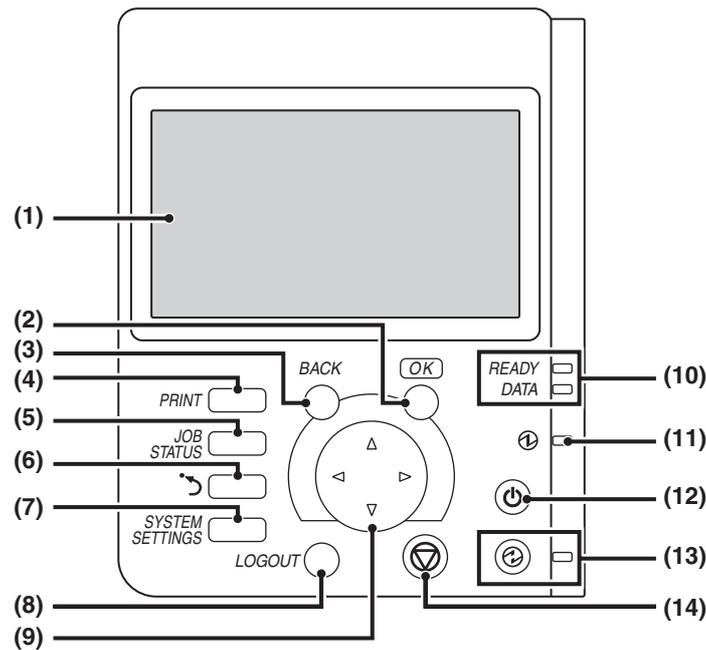
(1) Display

Messages and keys appear in the display.
Use the arrow keys and the [OK] key to select displayed items and perform various operations.
☞ USING THE OPERATION PANEL (page 1-8)

(2) [OK] key

Press this key to enter a selected setting.

(3) [BACK] key

Press this key to return to the previous screen without discarding your settings.

(4) [PRINT] key

When you wish to print a print hold job, press this key to switch to print mode.
You can hold down the [PRINT] key to check the total pages used, remaining toner, and machine display.

(5) [JOB STATUS] key

Press this key to display the job status screen. The job status screen is used to check information on jobs and to cancel jobs.
For details, see "CHECKING THE PRINT STATUS" (page 2-79).

(6) Sharp OSA shortcut key

Press this key to display a shortcut key to Sharp OSA mode.

(7) [SYSTEM SETTINGS] key

Press this key to display the system settings menu screen. The system settings are used to configure paper tray settings, and adjust parameters to make the machine easier to use.

(8) [LOGOUT] key

Press this key to log out after you have logged in and used the machine.
☞ USER AUTHENTICATION (page 1-15)

(9) Arrow keys

Press these keys to move the selection frame that is used to select setting keys and items in the display.

(10) PRINT mode indicators

• **READY indicator**

Print jobs can be received when this indicator is lit.

• **DATA indicator**

This blinks while print data is being received and lights steadily while printing is taking place.

(11) Main power indicator

This lights up when the machine's main power switch is in the "on" position.
☞ TURNING THE POWER ON AND OFF (page 1-13)

(12) [POWER] key ( )

Use this key to turn the machine power on and off.
☞ TURNING THE POWER ON AND OFF (page 1-13)

(13) [POWER SAVE] key ( ) / indicator

Use this key to put the machine into auto power shut-off mode to save energy.
The [POWER SAVE] indicator blinks when the machine is in auto power shut-off mode.

(14) [STOP] key ( )

Press this key to stop a printing job.
☞ [POWER SAVE] KEY (page 1-14)

✎ The indicators of the operation panel may differ depending on the country and region.

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USING THE OPERATION PANEL

This section explains how to use the operation panel.
- To enter text, see "ENTERING TEXT" (page 1-75).
- For information on the screens and procedures for using the system settings, see "Common Operation Methods" (page 3-5) in "3. SYSTEM SETTINGS".

USING THE DISPLAY

Base screen
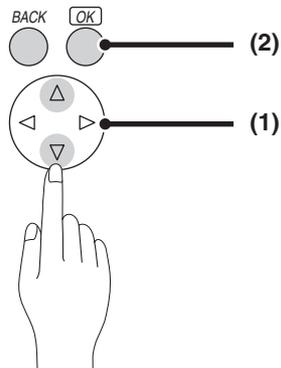
(1) Move the selection frame with the arrow keys

Use the arrow keys to move the selection frame in the display to the desired setting key.

Selection frame

(2) [OK] key

When the selection frame is on the desired setting, press the [OK] key to enter your selection. The setting screen will appear.

Selecting items in lists and returning to the previous screen
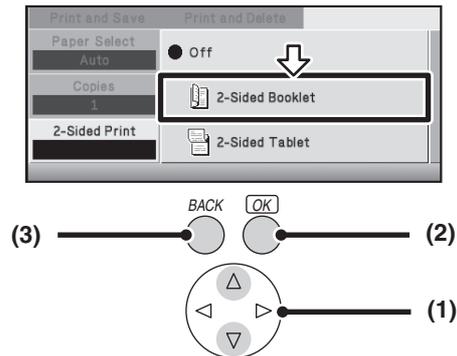
(1) **When selections appear as a list in a setting screen, select the desired item in the list with the** ▽ △ **keys.**

Items that are currently set are indicated by ●.

(2) **Press the [OK] key to enter your selection.**

- When the [OK] key is pressed, ● appears next to the selected item.
- For a selected item that has a checkbox, the checkbox changes between ☐ and ☑ each time the [OK] key is pressed. ☑ indicates that the setting is selected.

**(3)** **To return to the previous screen, press the [BACK] key.**

To return to the base screen, select the [Basic Menu] key.

Entering numbers

There are three methods for entering numbers.
Entering with the increment/decrement keys (below)
Entering with the arrow keys (page 1-10)
Using the soft numeric keypad (page 1-10)

Entering with the increment/decrement keys

To change the paper size, enter a number as follows.
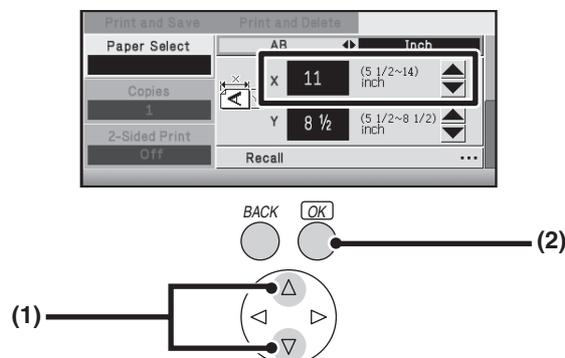
(1) **If a setting requires that a number be entered, move the selection frame to ▼ or ▲.**

(2) **The number increases or decreases each time the [OK] key is pressed. To make the number change quickly, hold down the [OK] key.**

1-9

Entering with the arrow keys

To change the number of copies, enter a number as follows.
Example: 123
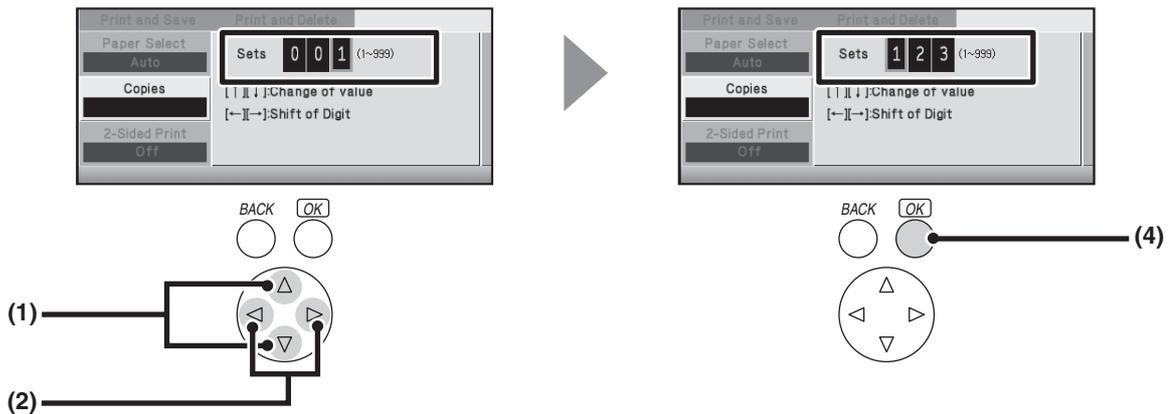
(1) Select the number with the ▽ △ keys.

(2) Use the ◁ ▷ keys to move the frame to the next place.

(3) Repeat steps (1) and (2) to enter 2 and 3.

(4) After entering the number, press the [OK] key

> ✎ **To restore a number...**
> Set all digits to 0.

Using the soft numeric keypad

To enter a password or page number, use the soft numeric keypad to enter the number.
Example: 123
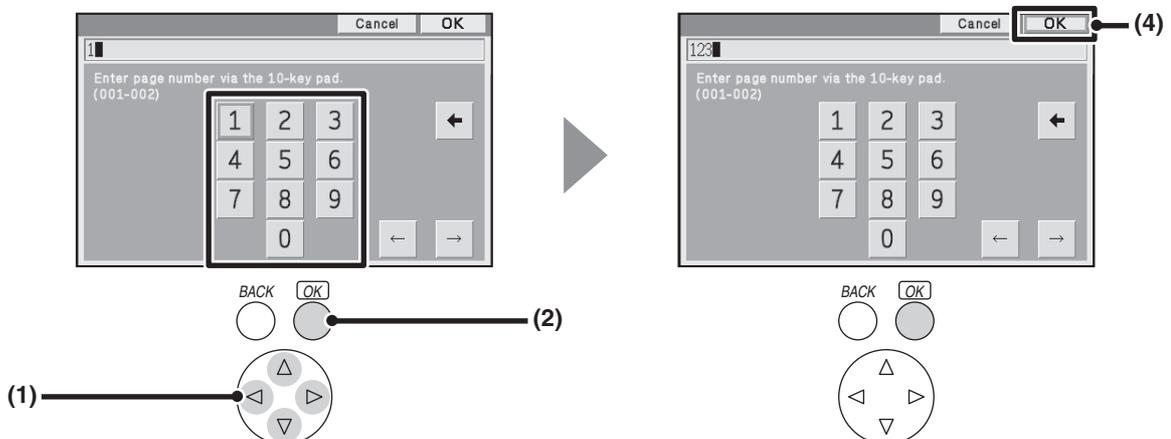
(1) Use the arrow keys to move the frame to the desired number.
Here the frame is moved to "1".

(2) Press the [OK] key.

(3) Repeat steps (1) and (2) to enter the desired number.
Here enter "2" and "3".

(4) When you have finished entering the number, select the [OK] key.

> ✎ **Adding a digit..**
> Move the cursor to the position where you want to add a digit and enter the digit.
> **Deleting a digit..**
> Move the cursor to the position immediately after the digit you wish to delete and select the ← key. The digit immediately before the cursor is deleted.

Items that appear in the display
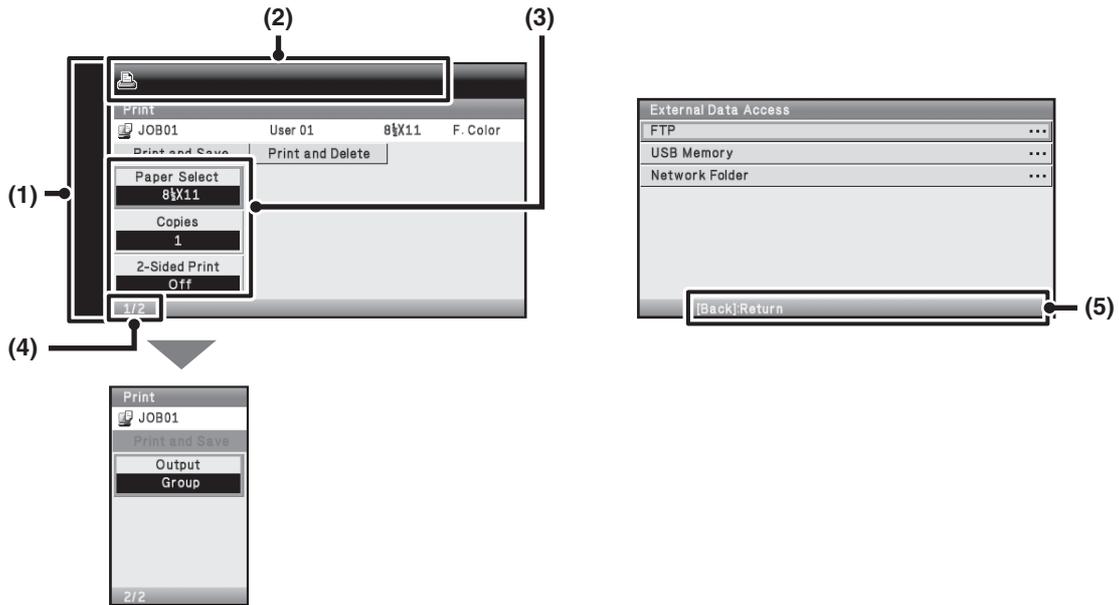
(1) Icon display

	This icon appears when a USB memory or other USB device is connected to the machine.
	This icon appears when the data security kit is being used.
	This icon appears when the machine is communicating with an external application.
	This icon appears when the machine and computer are communicating using the remote operation function.

(2) This shows messages.

(3) Settings appear here.

If you move the selection frame to the bottom setting and then press the ▽ key, the next screen appears.

(4) This shows the current page / total pages.

(5) This shows an operation hint.

The display illustrations shown in this manual are only images, and may differ from the actual screens.

System Settings (Administrator): Keys Touch Sound
This is used to adjust the volume of the beep that sounds when keys are touched. The key touch sound can also be turned off.

USING THE WEB PAGE

The procedures for using the Web page are explained below.
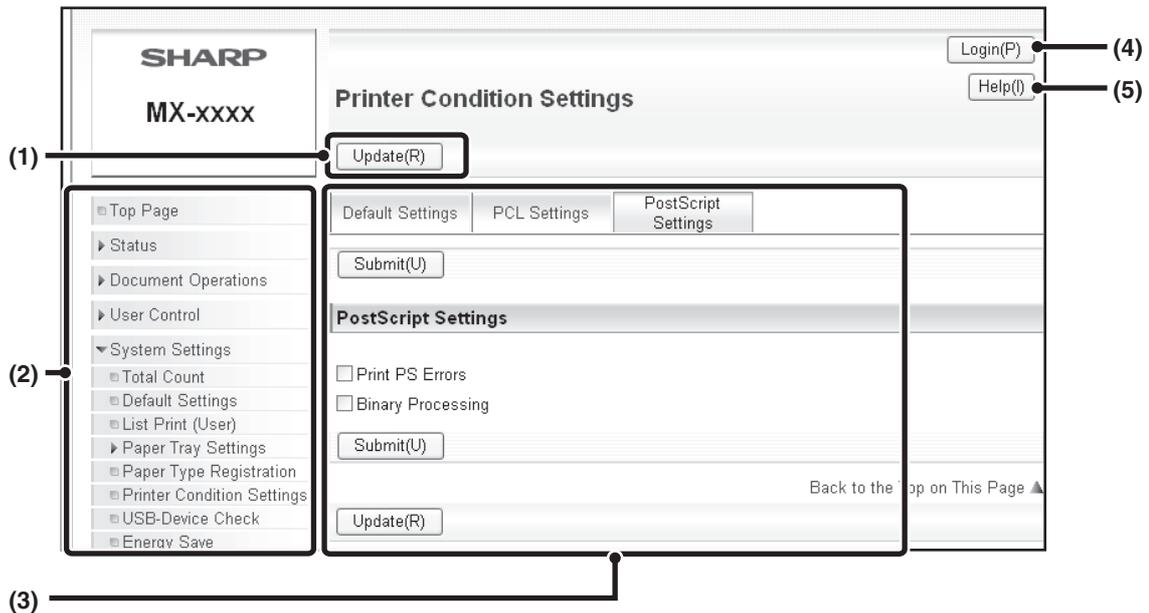
(1)   Common buttons

The [Submit] button used to store settings, the [Update] button used to update settings, and the [Cancel] button used to cancel a setting and return to the previous screen appear here.
After changing a setting, be sure to click the [Submit] button.

(2)   Web page menu

The items that can be set in the Web page appear here. Click an item to display the settings of that item.

(3)   Settings appear here.

The settings of an item selected from the Web page menu appear here.

(4)   [Logout] button

When user authentication is enabled, click this button to log out from the Web server. When you are not logged in, this button is the [Login] button.

(5)   [Help] button

This shows Help for each item.

TURNING THE POWER ON AND OFF

The machine has two power switches. One is the main power switch on the left side of the machine, and the other is the [POWER] key ( ) on the right side of the operation panel.

Main power switch
When the main power switch is switched on, the main power indicator on the operation panel lights up.

[POWER] key

Main power indicator

"On" position
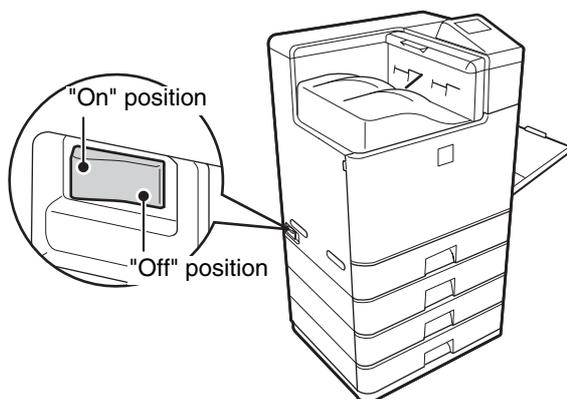
"Off" position
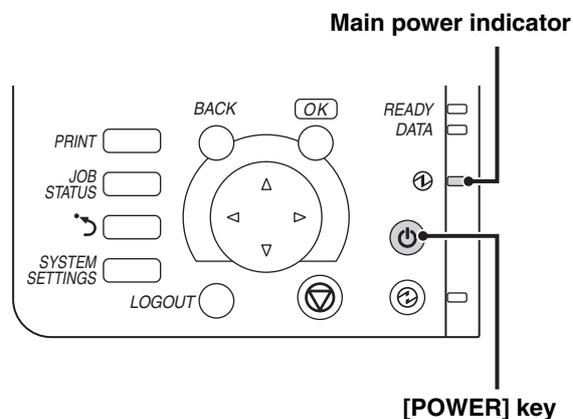
[POWER] key

Turning on the power

(1) Switch the main power switch to the "on" position.

(2) Press the [POWER] key ( ) to turn on the power.

Turning off the power

(1) Press the [POWER] key ( ) to turn off the power.

**(2) Make sure that the display is off.**

(3) Switch the main power switch to the "off" position.

> • When turning off the power, be sure to press the [POWER] key ( ) on the operation panel, then wait 20 seconds and switch off the main power switch. In the event that the main power is suddenly interrupted due to a power failure or other reason, turn the machine power back on and then turn it off in the correct order.
> If the machine is left for a long time with the main power having been turned off prior to the [POWER] key ( ), abnormal noises, degraded image quality, and other problems may result.
> • Before switching off the main power switch, make sure that the display is off and the DATA indicator for printing is not lit or blinking on the operation panel.
> Switching off the main power switch or removing the power cord from the outlet while any of the indicators are lit or blinking may cause failure, such as damage to the hard drive or loss of data.
> • Switch off both the [POWER] key ( ) and the main power switch and unplug the power cord if you suspect a machine failure, if there is a bad thunderstorm nearby, or when you are moving the machine.

Restarting the machine

In order for some settings to take effect, the machine must be restarted.
If a message in the display prompts you to restart the machine, press the [POWER] key ( ) to turn off the power and then press the key again to turn the power back on.

> In some states of the machine, pressing the [POWER] key ( ) to restart will not make the settings take effect. In this case, use the main power switch to switch the power off and then on.

ENERGY SAVE FUNCTIONS

This product has the following two energy save functions that conform to the Energy Star guidelines to help conserve natural resources and reduce environmental pollution.

Preheat Mode (Low power mode)

Preheat mode automatically lowers the temperature of the fusing unit and thereby reduces power consumption if the machine remains in the standby state for the interval of time set in "Preheat Mode Setting" in the system settings (administrator).
The machine automatically wakes up and returns to normal operation when a print job is received, a key is pressed on the operation panel.

Auto power shut-off mode (Sleep mode)

Auto power shut-off mode automatically shuts off power to the display and the fusing unit if the machine remains in the standby state for the interval of time set in "Auto Power Shut-Off Timer" in the system settings (administrator). This mode provides the lowest level of power consumption. Considerably more power is saved than in preheat mode, however, the wakeup time is longer. This mode can be disabled in the system settings (administrator).
The machine automatically wakes up and resumes normal operation when a print job is received or when the [POWER SAVE] key ( ) is pressed.

[POWER SAVE] KEY

Press the [POWER SAVE] key ( ) to put the machine in auto power shut-off mode or wake it up from auto power shut-off mode. The [POWER SAVE] indicator has an indicator that indicates whether or not the machine is in auto power shut-off mode.

When the [POWER SAVE] indicator is off in the standby state	The machine is ready to be used. If the [POWER SAVE] key ( ) is pressed when the indicator is off, the indicator will blink and the machine will enter auto power shut-off mode after a brief interval.
When the [POWER SAVE] indicator is blinking	The machine is in auto power shut-off mode. If the [POWER SAVE] key ( ) is pressed when the indicator is blinking, the indicator will turn off and the machine will return to the ready state after a brief interval.

[POWER SAVE] key / indicator
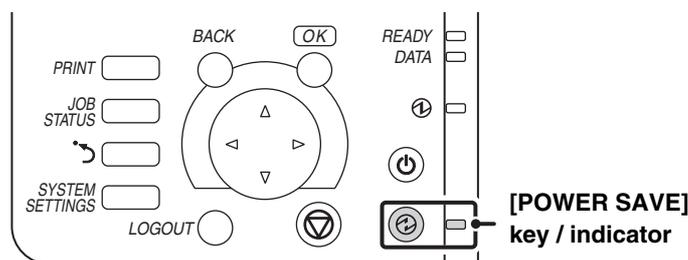
USER AUTHENTICATION

User authentication restricts the use of the machine to users that have been registered. The functions that each user is allowed to use can be specified, allowing the machine to be customized to meet the needs of your workplace.
When the administrator of the machine has enabled user authentication, each user must log in to use the machine.
There are different types of user authentication, and each type has a different login method.
For more information, see the explanations of the login methods.
☞ AUTHENTICATION BY USER NUMBER (see below)
☞ AUTHENTICATION BY LOGIN NAME / PASSWORD (page 1-17)

AUTHENTICATION BY USER NUMBER

The following procedure is used to log in using a user number received from the administrator of the machine.
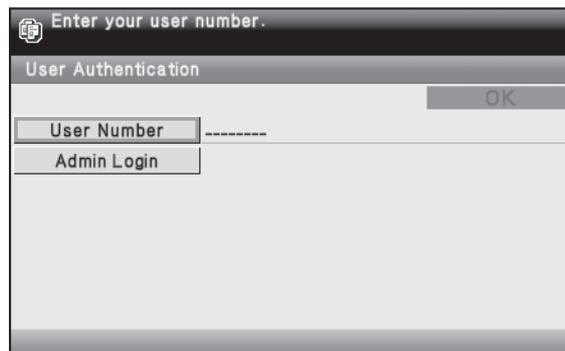
When controlled by user number

Keys in the display can be selected with the arrow keys and the [OK] key.

| 1 | **Select [User Number] key.** |

| 2 | **Enter your user number (5 to 8 digits) with the soft numeric keypad.**

Each entered digit will be displayed as "✱".
For the procedure for entering numbers, see "Entering numbers" (page 1-9). |

1-15

3

Select the [OK] key.

After the entered user number is authenticated, the user count screen will appear briefly.

When page limits have been set in "Pages Limit Group List" in the Web page, the number of pages remaining will appear. (The remaining number of pages that the user can use appears.) The amount of time that this screen appears can be changed using "Message Time Setting" in the system settings (administrator).

When the user number is an 8-digit number, this step is not necessary. (Login takes place automatically after the user number is entered.)

4

LOGOUT

When you have finished using the machine and are ready to log out, press the [LOGOUT] key.

If a preset duration of time elapses after the machine is last used, the Auto Clear function will activate. When Auto Clear activates, logout takes place automatically.

If an incorrect user number is entered 3 times in a row...

If "A Warning when Login Fails" is enabled in the Web page, the machine will lock for 5 minutes if an incorrect user number is entered 3 times in a row.
Verify the user number that you should use with the administrator of the machine.

The administrator can clear the locked state.
This is done from [User Control] and then [Default Settings] in the Web page menu.

AUTHENTICATION BY LOGIN NAME / PASSWORD

The following procedure is used to log in using a login name and password received from the administrator of the machine or the administrator of the LDAP server.
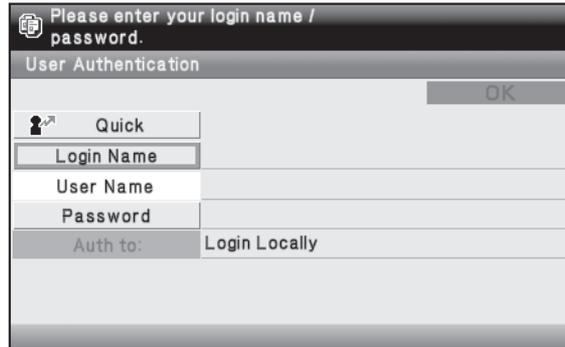
When controlled by login name and password
(Different items will appear in the screen when LDAP authentication is used.)

Keys in the display can be selected with the arrow keys and the [OK] key.

1

Select the [Login Name] key or the [Quick] key.

If the [Login Name] key is selected, a screen for selecting the user name appears. Go to the next step.
If the [Quick] key is selected, an area for entering a "Registration No." appears [---].
Use the soft numeric keypad to enter your registration number that has been stored in "User List" in the Web page. For the procedure for entering numbers, see "Entering numbers" (page 1-9). After entering the registration number, go to step 3.

2
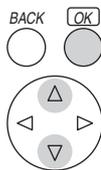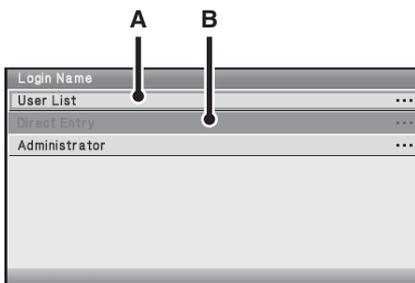
Select the user name.

(A) **[Direct Entry] key**
Users who are not registered users and are only using LDAP authentication use this key.
A text entry screen will appear. Enter your login name.

(B) **[User List] key**
Select your user name that has been stored in "User List" in the Web page.

LDAP authentication can be used when the administrator of the server provides LDAP service on the LAN (local area network).

3
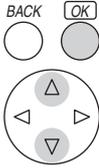
Select the [Password] key.

A text entry screen for entering the password will appear.
Enter your password that is stored in "User List" in the Web page.

If you are logging in to an LDAP server, enter the password that is stored with your LDAP server login name.
Each entered character will be displayed as "✱". When you have finished entering the password, select the [OK] key.
When authentication is by LDAP server and you have different passwords stored in "User List" in the Web page and in the LDAP server, use the password stored in the LDAP server.

- When an LDAP server has been stored, [Auth to:] can be changed.

- **If you selected a login user name from the user list…**
  The LDAP server was stored when your user information was stored, and thus the LDAP server will appear as the authentication server when you select your login name. Go to step 4.
- **When logging in using the [Direct Entry] key...**
  Select the [Auth to:] key.

Select the LDAP server.

4

(Different items will appear in the screen when LDAP authentication is used.)

Select the [OK] key.

After the entered login name and password are authenticated, the user count screen will appear briefly.

When page limits have been set in "Pages Limit Group List" in the Web page, the number of pages remaining will appear. (The remaining number of pages that the user can use appears.) The amount of time that this screen appears can be changed using "Message Time Setting" (Web page only) in the system settings (administrator).

5

LOGOUT

When you have finished using the machine and are ready to log out, press the [LOGOUT] key.

If a preset duration of time elapses after the machine is last used, the Auto Clear function will activate. When Auto Clear activates, logout takes place automatically.

If an incorrect login name or password is entered 3 times in a row...

If "A Warning when Login Fails" is enabled in the Web page, the machine will lock for 5 minutes if an incorrect login name or password is entered 3 times in a row.
Verify the login name and password that you should use with the administrator of the machine.

- The administrator can clear the locked state.
  This is done from [User Control] and then [Default Settings] in the Web page menu.
- When LDAP authentication is used, the [E-mail Address] key may appear, depending on the authentication method. If the [E-mail Address] key appears in step 3, select the key.
  A text entry screen will appear. Enter your e-mail address.
- **USER LIST** (page 1-21)
  This is used to store names of users of the machine. Detailed information such as the login name, user number, and password are also stored. Ask the administrator of the machine for the information that you need to use the machine.
  Registration is performed in [User List] in [User Control] in the Web page menu.

ACCESSING THE WEB PAGE

The login method for accessing the Web server in the machine varies depending on whether or not user authentication is enabled.
For information on accessing the Web server in the machine, see "ACCESSING THE WEB SERVER IN THE MACHINE" in the Quick Start Guide.

When user authentication is not enabled

If you click a setting that requires administrator authority after accessing the Web page, a login screen will appear. Enter your password.

When user authentication is enabled

Use the procedure below to log in. Note that when auto login user is enabled, the authentication screen will not appear.

When the login method is login name / password (/ e-mail address)

To access the Web page, enter a login name and password in the login screen that appears. If the login method is set to login name / password / e-mail address, a text box will appear for entry of your [E-mail Address]. If this box appears, enter your e-mail address.

When the authentication method is user number

To access the Web page, enter a user number in the login screen that appears.
In user number mode, you can also login from [Admin Login] in the login screen.

- User authentication is initially disabled (factory default setting).
- To prevent passwords from being leaked onto the network during login, it is recommended that the SSL function be enabled in the Web browser.
- **To log out…**
  Click the [Logout] key at the upper right of the Web page, or close the Web browser.

USER CONTROL

User Control is used to configure settings for user authentication in the Web page. Select the [User Control] key in the Web page menu to configure the settings.

USER LIST

This is used to store, edit, and delete users when user authentication is enabled.
When the [User List] key is selected, the following screen appears.
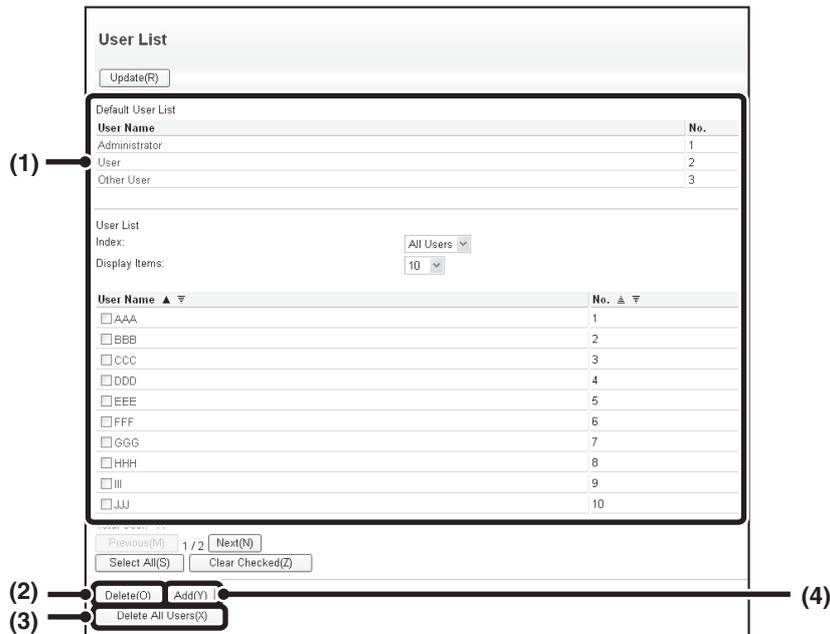
(1) User List

This shows the factory-stored users and the currently stored users.

(2) [Delete] key

Use this to delete a registered user.

(3) [Delete All Users] key

Use this to delete all stored users. (Excluding factory stored users.) This operation can only be performed by an administrator.

(4) [Add] key

Use this to add a new user.

Storing a user

Select the [Add] key in the above screen to open a registration screen. Up to 1000 users can be stored.
For more information, see "Settings" (page 1-22).

Editing/deleting a user

To open an edit screen for a user, select the user from the list in the above screen. To open a delete screen for a user, select the checkbox next to the user (☑) and then select [Delete].
For more information, see "Settings" (page 1-22).

> • When auto login is enabled, "Delete All Users" cannot be used.
> • The factory-stored users cannot be deleted.

Factory-stored users

The following users are stored in the machine at the factory.
- Administrator: Factory-stored account for the administrator of the machine.
- User: This is used when network authentication is used and a login name not stored in the machine is directly entered. (This cannot be selected in the login user screen.)
- Other User: This is used when a print job is executed using invalid user information. (This cannot be selected in the login user screen.)

For settings related to each of the users, see the following table.

User Name	Administrator	User	Other User
Login Name	admin	users	Other
Password	(See the Safety Guide.)*[1]	users*[1]	–
My Folder	Main Folder		
Authentication Settings	Login Locally		–
Pages Limit Group	Unlimited*[1]		
Authority Group*[2]	Admin	User*[1]	Guest*[1]
Favorite Operation Group	Following the System Settings*[1]		

*1 Items that can be changed.
*2 For detailed information of each of the settings, see "List of settings and factory default settings of template groups" (page 1-28).

Settings

Item	Description
User Name	Store the name of the user (max. 32 characters). This user name is used as the key name in the login screen and the print hold user name. (The user name must be unique.)
Apply User Name to Log-in Name*[1]	Select this key to enter the entered user name in the login name.
Initial	This determines where the user name will appear in the user list. Up to 10 characters can be entered.
Index	Select the desired custom index.
User Number*[2]	Enter a user number (5 to 8 digits).
Login Name*[1]	Enter the login name used when authentication by login name/password is enabled (maximum of 255 characters). (The login name must be unique.)
Password*[1, 3]	Enter the password used when authentication by login name/password is enabled (1 to 32 characters). (The password can be omitted.)
E-mail Address	Enter the e-mail address for LDAP authentication (maximum of 64 characters).
My Folder	A folder ("My Folder") can be specified as the folder used by the user for print hold. A previously created folder can be selected or you can create and select a new folder.
Authentication Settings*[1]	Select [Login Locally] or [Network Authentication] (when LDAP is enabled) for "Authenticate to:".
Authentication Server	When [Network Authentication] is selected, select the server to be used for user authentication from the list of LDAP servers stored in the Web pages.
Pages Limit Group	Specify page limits for the user by selecting one of the stored page limit groups. The factory default setting is [Unlimited]. For more information, see "PAGE LIMIT GROUP LIST" (page 1-26).

Item	Description
Authority Group	Specify the authority of the user by selecting one of the stored authority groups. The factory default setting is [User]. For more information, see "AUTHORITY GROUP LIST" (page 1-27).
Favorite Operation Group	The favorite operation group that will be applied at login appears. The factory default setting is [Following the System Settings]. The setting can be changed in the [User Control] menu in the Web pages.
Custom Index	Select the custom index.

*1 Does not appear when "User Number" is selected for the authentication method.

*2 Only appears when "User Number" is selected for the authentication method.

*3 Not required when network authentication is used, as the password stored in the LDAP server is used.

DEFAULT SETTING

These settings enable or disable user authentication and specify the authentication method.
When user authentication is enabled, each user of the machine is registered. When a user logs in, settings for that user are applied. This function allows greater control of security and cost management.
In addition, even if the user information is not stored in the machine, it is possible to log in by directly entering user information stored on an LDAP server. In this case, the login user will be the factory-stored "User". For more information, see "Factory-stored users" (page 1-22).

> • For the procedure for storing users, see "USER LIST" (page 1-21).
> • For more information on login procedures when user authentication is enabled, see "USER AUTHENTICATION" (page 1-15).

User Authentication

When [User Authentication] is enabled, the login screen appears before an operation is begun in any mode except the job status screen*. You must log in as one of the stored users. (After logging in, you can move freely through the modes.)
* Except when a print hold (retention) file is used in the job status screen.

Authentication Method Setting

This selects the authentication method. When using user authentication, be sure to configure this setting first. The items configured for users stored after the user authentication method is set vary depending on the selected authentication method.

Authenticate a User by Login Name and Password
Standard authentication method using a login name and password.

Authenticate a User by Login Name, Password and E-mail Address
In addition to a login name and password, this authentication method also requires the entry of an e-mail address.

Authenticate a User by User Number Only
This can be used as a simple authentication method when network authentication is not used.

> • The login screen will vary depending on the authentication method that is selected. For more information, see "USER AUTHENTICATION" (page 1-15).
> • When "Authenticate a User by User Number Only" is selected for the authentication method, network authentication cannot be used.

Device Account Mode Setting

A specific user can be stored as an auto login user. When this setting is enabled, login can be performed automatically.
This function eliminates the bother of logging in but still allows the settings of the selected user (network settings, favorite operations, etc.) to be applied.
You can also allow users other than the auto login user to temporarily log in and work using their own authority and settings. To allow other users to log in temporarily when [Device Account Mode] is enabled, select [Allow Login by Different User].
As an example, this enables uses such as "authentication for color printing only".

> • If auto login fails for some reason when auto login is enabled, or the login user does not have administrator rights, all system settings or the system settings (administrator) will lock. In this event, the administrator should select the [Admin Password] key in the system settings screen and log in again.
> • To log in as a user other than the auto login user when [Allow Login by Different User] is enabled, press the [LOGOUT] key to cancel the auto user login state. The user authentication screen will appear to let you log in. After using the machine, press the [LOGOUT] key to log out.

Actions when the Limit of Pages for Output Jobs

This setting determines whether or not a job will be completed if the page limit is reached while the job is in progress.
The following selections are available.
• Job is Stopped when the Limit of Pages is Reached
• Job is Completed even when the Limit of Pages is Reached

The Number of User Name Displayed Setting on Operation Panel

The number of users that are displayed in the user selection screen can be selected (6, 12, or 18 users).

✎ This setting also applies to the user selection screen of print hold.

A Warning when Login Fails

This setting is used to display a warning and prohibit login for five minutes if login fails three times in a row. This prevents an unauthorized person from attempting to guess a password. (The number of failed login attempts is retained even if the power is turned off.)

✎ Locking of the operation panel for 5 minutes can be canceled.

Disabling of Printing by Invalid User

Printing by users whose information is not stored in the machine, such as printing without entering valid user information in the printer driver or printing of a file on an FTP server from the Web pages, can be prohibited.

✎ When a print job is executed by a user that is not stored in the machine, the factory-stored "Other User" is used as the login user. For more information, see "Factory-stored users" (page 1-22).

Automatically print stored jobs after login

When retention is enabled in the printer driver and print data has been spooled to the machine, you can have the spooled print data automatically print out when the user who enabled retention logs in.

Default Network Authentication Server Setting

Use this to set the default network authentication server. When a user logs in from the Web page or sends a print job to the machine using user information that is not stored on the machine, the authentication server is not known. This setting is used to specify one of the LDAP servers stored on the machine as the authentication server.

✎ When login is performed by network authentication using user information that is not stored in the machine, the login user will be the factory-stored "User". For more information, see "Factory-stored users" (page 1-22).

Display Usage Status after Login

When user authentication is enabled, this setting specifies whether or not the page counts of a user appear when the user logs in.

Disable Switching of Display Order

This is used to prohibit changes to the order of display (search number order, ascending, descending) in the user list.
When this setting is enabled, selecting a tab on the user list screen does not change the order. The display order will remain fixed at the order that is in effect when this setting is enabled.

User Information Print

The following lists can be printed.
 • User List
 • List of Number of Pages Used
 • Page Limit Group List*
 • Authority Group List
 • Favorite Operation Group List*
 • All User Information Print
Select the key of the desired list to begin printing.
* Cannot be printed when no groups are stored.

Release the Lock on Machine Operation Panel

If the operation panel of the machine is locked due to login failure, release the lock by logging in as an administrator.

PAGE LIMIT GROUP LIST

This is used to store groups of Account Limit Settings. The page limits for each user are specified by selecting one of these stored groups when the user is stored.
When the [Page Limit Group List] key is selected, the following screen appears.
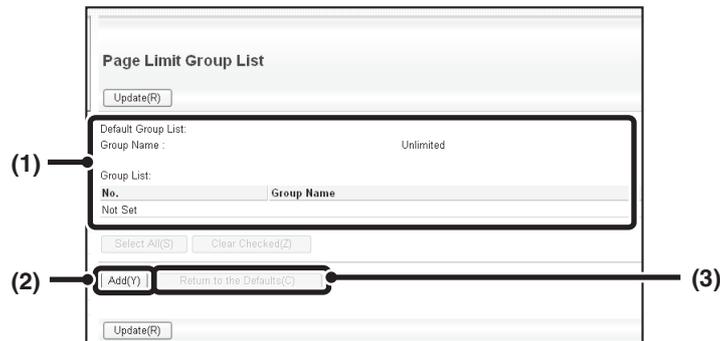
(1) List display

This shows the currently stored groups. A group name can be selected to open an edit/delete screen for that group.

(2) [Add] key

Use this to add a new group.

(3) [Return to the Defaults] key

Use this to return the group settings to the factory default settings and delete the groups from the list.

Storing a page limit group

Select the [Add] key in the above screen to open a registration screen. Up to 20 groups can be stored.
For more information, see "Settings".

Editing a page limit group

To open an edit screen for a group, select the group name from the list in the above screen. To delete a group from the list, select the checkbox next to the group (☑) and then select [Return to the Defaults]. A confirmation prompt will appear. Select [OK] to delete the group.
For more information, see "Settings".

Settings

Item	Description
Group Name	Store the name of the group (max. 32 characters).
Select the Group Name to be the Registration Model	Select one of the previously stored groups for use as a template for the new group. When selected, the group's settings are applied.
Function names	The names of the functions that can be configured are displayed. Set a limit for each function.
Page Limit	When [Prohibited] is selected for a mode, input and output from the mode are prohibited. When [Unlimited] is selected for a mode, there is no limit to the number of pages that can be input/output in that mode. When [Limited] is selected, enter a limit (1 to 99,999,999 pages).

AUTHORITY GROUP LIST

Use this to store groups of user authority settings. The authority of each user is specified by selecting one of these stored groups when the user is stored.
When the [Authority Group List] key is selected, the following screen appears.

(1) List display

This shows the currently stored groups. A group name can be selected to open an edit/delete screen for that group.

(2) [Add] key

Use this to add a new group.

Storing an authority group

Select the [Add] key in the above screen to open a registration screen. Up to 20 groups can be stored.
For information on the settings, see "List of settings and factory default settings of template groups" (page 1-28).

Editing an authority group

A group can be selected from the list in the above screen to open an edit/delete screen for the group. For information on the settings, see "List of settings and factory default settings of template groups" (page 1-28).
To return a group to the factory default state, select the checkbox next to the group (☑), and then select [Return to the Administrator Authority], or [Return to the User Authority], or [Return to the Guest Authority]. The selected authority will be given to the users in that group and the group will be deleted from the list.

List of settings and factory default settings of template groups

Item	Description		
Group Name	Store the name of the group (max. 32 characters).		
Select the Group Name to be the Registration Model	Select one of the previously stored groups for use as a template for the new group. When selected, the group's settings are applied. The factory default groups and their settings are shown below.		
	Admin	**User**	**Guest**
Printer			
Color Mode Approval Setting	Allowed	Allowed	Only Black & White Allowed
FTP Pull Print	Allowed	Allowed	Prohibited
USB Memory Direct Print	Allowed	Allowed	Prohibited
Network Folder Pull Print	Allowed	Allowed	Prohibited
Print hold			
Print Hold Image Check	Allowed	Allowed	Prohibited
Sharp OSA			
Approval Settings to Use a Sharp OSA	Allowed	Allowed	Allowed
Common Functions			
Approval Settings for 2-Sided Print	[1-Sided/2-Sided Approved]	[1-Sided/2-Sided Approved]	[1-Sided/2-Sided Approved]
Output Approval Settings	Allowed	Allowed	Prohibited
Machine Settings			
System Settings Operational Authority			
System Settings*1	Allowed*2	Only user authority settings are allowed	All settings prohibited
Web Settings Operational Authority			
Display of Device/Network Status	Allowed	Allowed	Prohibited
Power Reset		Prohibited	
Machine Identification		Prohibited	
Application Settings		Prohibited	
E-mail Alert and Status		Prohibited	
Job Log Setting		Prohibited	
Port Control/ Filter Settings		Prohibited	
Custom Link Setting		Prohibited	
Operation Manual Download		Allowed	

*1 For information on each setting, see the system settings (general/administrator) lists.
*2 All allowed except "Change Administrator Password".

✎ Depending on the machine specifications and peripheral devices installed, it may not be possible to use some settings.

FAVORITE OPERATION GROUP LIST

This is used to store favorite operation groups.

Favorite Operation Group Registration

Groups of preferred settings can be stored as "favorite operation groups". For example, a user who speaks a different language would normally have to change the display language each time he or she uses the machine; however, by storing the language in a favorite operation group, the language is automatically selected when the user logs in.

Settings

Item	Description
Group Name	Store the name of the group (max. 32 characters).
Select the Group Name to be the Registration Model	Select one of the previously stored groups for use as a template for the new group. When selected, the group's settings are applied.
System Settings	
Display Language Setting	Select the display language.
Key Operation Setting	Set the key input time and Auto Key Repeat setting.
Keys Touch Sound	Set the sound made when keys are selected.
Keyboard Select	Set the language that appears on the keyboard.
Machine Display Pattern Setting	Select the color pattern used in the display.
Automatically print stored jobs after login	When retention is enabled in the printer driver and print data has been spooled to the machine, you can have the spooled print data automatically print out when the user who enabled retention logs in.

VIEW USER COUNT

This displays the total number of pages printed by each user.
When the [View User Count] key is selected, the following screen appears.

(1) User List

This shows the factory-stored users and the currently stored users. To select a user, select the user name.

(2) [Select All] key

This selects all users.

(3) [Show] key

This shows the counts of the selected user.

(4) [Clear Count] key

Use this to reset the counts of the selected user.

Showing user count

Select a user in the above screen and select the [Show] key. The counts of that user will appear.

| Item	Settings
Next	This shows the next user (in the order of the registration numbers).
Previous	This shows the previous user (in the order of the registration numbers).
Pages used	The counts and the number of pages remaining of the selected user are shown by function.
Page Limit	The page limit set for the user appears in parentheses below the count.

> Counts of devices that are not installed do not appear.

Resetting user counts

To clear the count of a user, select the user from the list and then select [Clear Count]. A confirmation prompt will appear. Select [OK] to clear the count of that user.

REMOTE OPERATION OF THE MACHINE

The remote operation function allows you to operate the machine from your computer.
When this function is added, the same screen as the operation panel screen appears on your computer. This allows you to operate the machine from your computer in the same way as if you were standing in front of the machine.

Operate the machine using your computer screen.

Your computer

The machine

Operation panel

Network
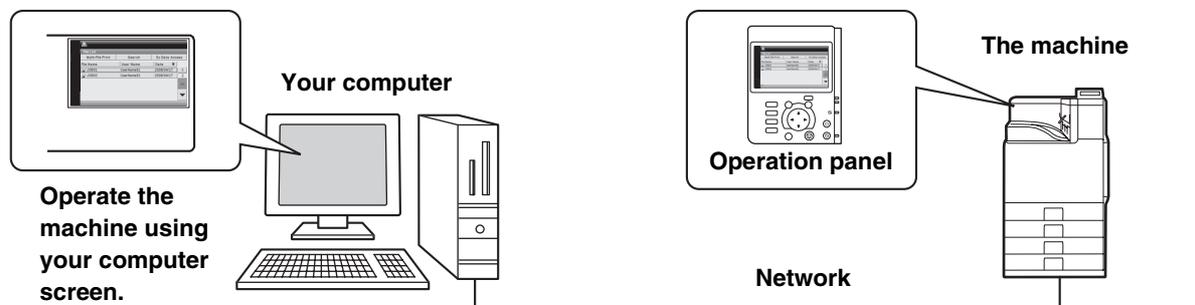
The remote operation function can only be used on one computer at a time.

How to use the remote operation function

Before using this function, set "Operational Authority" to "Allowed" in "Remote Software Operation" of "Remote Operation Settings" (Web page only) in the system settings (administrator).
☞ 3. SYSTEM SETTINGS "Remote Operation Settings" (page 3-53)
To use the remote operation function, the machine must be connected to a network and a VNC application must be installed on your computer (recommended VNC software: RealVNC).
The procedure for using this function is as follows:

Example: RealVNC

1		**Connect from the computer to the machine.** (1) **Start the VNC viewer** (2) **Enter the IP address of the machine in the "Server" entry box.** (3) **Click the [OK] button.**

2	**Follow the prompts on the operation panel of the machine to permit the connection.** During remote software communication, the ⊡ key appears in the system settings of the machine. If you wish to break the connection, exit the remote software or press the [SYSTEM SETTINGS] key on the operation panel and select the ⊡ key in the screen that appears.

Use the operation panel in the same way as you would on the machine. Note that a key cannot be held down to continuously change a value being entered. For detailed procedures, see the chapters for each of the functions in this manual.

System Settings (Administrator): Remote Operation Settings (Web page only)
Set the operation authority for the remote operation function.
Registration is performed in [System Settings] - [Operation Settings] - "Remote Operation Settings" in the Web page menu.

JOB LOG

The machine retains a log of the jobs that are performed. Settings for the job log stored in the machine are configured on the Web page. Select [Job Log] on the Web page to configure the settings.

SAVE / DELETE JOB LOG

The log of jobs executed on the machine can be stored or deleted.

Item	Settings
Job Log	The total number of stored job logs appears.
Save Job Log	
Save and Delete the Data	Deletes the job log after saved if checked.
[Save] button	Saves the job log.
The Number of Job Log to Notify by E-mail	Select the number of jobs that triggers e-mail notification. Informs the address configured in E-mail alert when the designated number is reached.
Delete Job Log	
[Delete] button	Deletes the job log.

VIEW JOB LOG

The log of jobs executed on the machine can be displayed.
The items to be displayed and the applicable period can be selected.

Item	Settings
Select Item	Select the item to be displayed.
[Show] button	Displays the job log.

ITEMS RECORDED IN THE JOB LOG

The machine records the jobs that are performed in the job log.
The main information that is recorded in the job log is described below.

> • To make it easy to total the usage counts of differently configured machines, the items recorded in the job log are fixed, regardless of what peripheral devices are installed or the objective of the recording. For this reason, items may appear in the log for functions that are not available on the machine.
> • In some cases, job information may not be correctly recorded, such as when a power failure occurs during a job.
> • JOB LOG (page 1-32)
>   The job log can be stored, deleted, or checked.
>   Registration is performed in [Job Log] in the Web page menu.

No.		Item name	Description
1	Main items	Job ID	The job ID is recorded. Job IDs appear in the log as consecutive numbers up to a maximum of 999999, after which the count resets to 1.
2		Job Mode	The job mode, such as print.
3		Computer Name	The name of the computer that sent a print job.*
4		User Name	The user name when the user authentication function is used.
5		Login Name	The login name when the user authentication function is used.
6		Starting Date & Time	The date and time the job was started.
7		Completing Date & Time	The date and time the job was completed.
8		Black & White Total Count	For a print job, the total count is recorded. For a print hold job, the number of stored black & white pages is recorded.
9		Full Color Total Count	For a print job, the total count is recorded. For a print hold job, the number of stored full color pages is recorded.
10		2-Color Total Count	Indicates the total 2-color count.
11		Single Color Total Count	Indicates the total single color count.
12		Count according to size	Counts by paper size in color mode and black & white mode.
13		Number of sheets according to size	Indicates the sheet count by paper type.
14		Invalid Paper Count(Black & White)	Indicates the black & white invalid sheet count.
15		Invalid Paper Count(Color)	Indicates the color invalid sheet count.

No.		Item name	Description
16	Main items	Number of Reserved Sets	Number of specified sets.
17		Number of Completed Sets	Number of completed sets.
18		Number of Reserved Pages	Number of reserved print jobs.
19		Number of Completed Pages	Number of completed pages of a set.
20		Result	The result of a job.
21		Error Cause	When an error occurs during a job, the cause of the error.
22	Print Job Related Item	Output	The output mode of a printed job.
23		Staple	The status of stapling.
24		Staple Count	The staple count.
25		Printer Tone	The tone used for a print job.
26	Print Hold Related Item	Print Hold	Print hold status.
27		Storing Mode	Print hold store mode.
28		File Name	Name of file stored by retention print.*
29		Data Size [KB]	File size.
30	Common Functionality	Color Setting	Color mode selected by user.
31		Special Modes	Special modes selected when the job was executed.
32		File Name 2	Records the file names of print jobs.*
33	Detailed Items	Original Size	This records the paper size of the print job.
34		Original Type	This records the "Original Type" of the print driver.
35		Paper Size	For a print job, the paper size. For a print hold job, the paper size of the stored file.
36		Paper Type	The paper type used for printing.
37		Paper Property: Disable Duplex	Indicates that duplex was disabled in "Paper Type".
38		Paper Property: Fixed Paper Side	Indicates that fixed side was specified in "Paper Type".
39		Paper Property: Disable Staple	Indicates that stapling was disabled in "Paper Type".
40		Duplex Setup	Indicates the duplex setting.
41		Resolution	Indicates the printing resolution.
42	Machine Item	Model Name	Indicates the model name of the machine.
43		Unit Serial Number	Indicates the serial number of the machine.
44		Name	Indicates the name of the machine that is set in the Web pages.
45		Machine Location	Indicates the installation location of the machine that is set in the Web pages.

*In some environments this is not recorded.

STORAGE BACKUP

User information stored in the machine can be backed up to your computer or restored from your computer via the Web page.
Settings and information stored in the machine can be backed up to your computer.
Settings can be exported or imported in XML format using the Web page. Select [Storage Backup] in the Web page menu and configure the settings.

	• The data is saved to the computer that is accessing the Web page.
	• This function cannot be used while the system settings are in use, while a job is being executed, or when there is a reserved job.
	• For machines for which data can be imported, contact your dealer or nearest SHARP Service Department.

EXPORT SETTINGS

Use these settings to back up data to your computer.

Item	Settings
Export Settings Type	Select the type of settings that you want to export.
Password	Enter the password that will be required to import settings (maximum of 16 characters).

IMPORT SETTINGS

Use these settings to restore data that was previously backed up to your computer to the machine.

Item	Settings
Import settings from file	Enter the name of the file to be imported (maximum of 200 characters). Click [Browse] to select the file from the file selection dialog box.
Password	If a password has been set for the file to be imported, enter the password (maximum of 16 characters).

DEVICE CLONING

Device cloning is used to save the machine's setting information in XML format and copy the information to another machine.
This function saves you the trouble of repeatedly configuring the same settings in multiple machines. Select [Device Cloning] in the Web page menu and configure the settings.

> • The data is saved to the computer that is accessing the Web page.
> • This function cannot be used while the system settings are in use, while a job is being executed, or when there is a reserved job.
> • For machines for which data can be imported, contact your dealer or nearest SHARP Service Department.
> • The following data is not copied when device cloning is performed:
>   - List print.
>   - Count and device status display items.
>   - IP address of the machine, device name, administrator password and other information that is specific to the machine.
>   - Screen contrast, color adjustment, and other adjusted values particular to each hardware device.

EXPORT SETTINGS

Use these settings to back up data to your computer.

Item	Settings
Export Settings Type	Select the type of settings that you want to export.
Password	Enter the password that will be required to import settings (maximum of 16 characters).

IMPORT SETTINGS

Use these settings to restore data that was previously backed up to your computer to the machine.

| Item	Settings
Import settings from file	Enter the name of the file to be imported (maximum of 200 characters). Click [Browse] to select the file from the file selection dialog box.
Password	If a password has been set for the file to be imported, enter the password (maximum of 16 characters).

LOADING PAPER

IMPORTANT POINTS ABOUT PAPER

This section provides information that you should know before loading paper in the paper trays.
Be sure to read this section before loading paper.

NAMES AND LOCATIONS OF TRAYS

The names of the trays are as follows.

Bypass tray
Tray 1
Tray 2
Tray 3
Tray 4
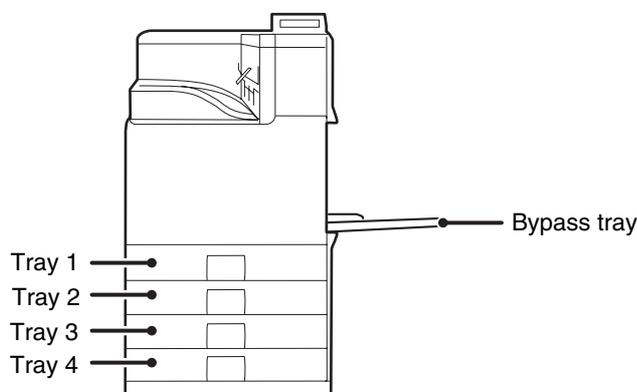
USEABLE PAPER

Various types of paper are sold. This section explains what plain paper and what special media can be used with the machine. For detailed information on the sizes and types of paper that can be loaded in each tray of the machine, see the specifications in the Safety Guide and "Paper Tray Settings" (page 3-37) in "6. SYSTEM SETTINGS".

Plain paper, special media

Plain paper that can be used
- SHARP standard plain paper (21 lbs. (80 g/m^2)). For paper specifications, see the specifications in the Safety Guide.
- Plain paper other than SHARP standard paper (16 lbs. to 28 lbs. (60 g/m^2 to 105 g/m^2))
  Recycled paper, colored paper and pre-punched paper must meet the same specifications as plain paper. Contact your dealer or nearest SHARP Service Department for advice on using these types of paper.

* The "lbs." (g/m^2) units used in these explanations indicate the weight of the paper.

Types of paper that can be used in each tray

The following types of paper can be loaded in each tray.

"–" in the table indicates "cannot be used".

	Tray 1/Tray 2/Tray 3/Tray 4	Bypass tray
Plain paper	Permitted	Permitted
Pre-printed	Permitted	Permitted
Recycle Paper	Permitted	Permitted
Letter head	Permitted	Permitted
Pre-punched	Permitted	Permitted
Color	Permitted	Permitted
Heavy paper*[1]	–	Permitted
Labels	–	Permitted
Glossy paper*[2]	–	Permitted
Transparency film	–	Permitted
Envelopes	–	Permitted
Thin paper*[3]	–	Permitted

*1 "Heavy paper" is heavy paper up to 110 lbs. index (209 g/m^2).

*2 Printer drivers that allow the use of glossy paper are PCL6, PCL5-c, and PS printer drivers in a Windows environment.

*3 Thin paper from 15 lbs. to 16 lbs. (55 g/m^2 to 59 g/m^2) can be used.

Print side face up or face down

Paper is loaded with the print side face up or face down depending on the paper type and tray.

Trays 1 to 4

Load the paper with the print side face up.

However, if the paper type is "Pre-Punched", "Letter Head" or "Pre-Printed", load the paper with the print side face down*.

Bypass tray

Load the paper with the print side face down.

However, if the paper type is "Pre-Punched", "Letter Head" or "Pre-Printed", load the paper with the print side face up*.

* If "Disabling of Duplex" (Web page only) is enabled in the system settings (administrator), load the paper in the normal way (face up in trays 1 to 4; face down in the bypass tray).

Paper that cannot be used

- Special media for inkjet printers
  (fine paper, glossy paper, glossy film, etc.)
- Carbon paper or thermal paper
- Pasted paper
- Paper with clips
- Paper with fold marks
- Torn paper
- Oil-feed transparency film
- Thin paper less than 15 lbs. (55 g/m^2)
- Paper that is 110 lbs. index (210 g/m^2) or heavier

- Irregularly shaped paper
- Stapled paper
- Damp paper
- Curled paper
- Paper on which either the print side or the reverse side has been printed on by another printer or multifunction device.
- Paper with a wave-like pattern due to moisture absorption

Non-recommended paper

- Iron-on transfer paper
- Japanese paper

- Perforated paper

> - Various types of plain paper and special media are sold. Some types cannot be used with the machine. Contact your dealer or nearest SHARP Service Department for advice on using these types of paper.
>
> - The image quality and toner fusibility of paper may change due to ambient conditions, operating conditions, and paper characteristics, resulting in image quality inferior to that of SHARP standard paper. Contact your dealer or nearest SHARP Service Department for advice on using these types of paper.
>
> - The use of non-recommended or prohibited paper may result in skewed feeding, misfeeds, poor toner fusing (the toner does not adhere to the paper well and can be rubbed off), or machine failure.
>
> - The use of non-recommended paper may result in misfeeds or poor image quality. Before using non-recommended paper, check if printing can be performed properly.

When removing printed output...

When removing printed output, remove slowly so as not to fold the paper.
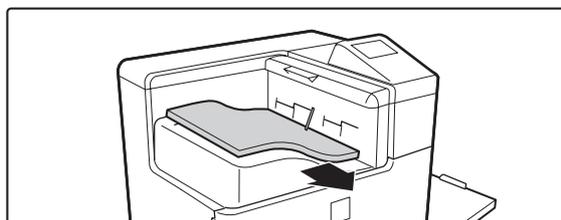
> When removing output, do not fold the paper or forcefully lift it up.
> In particular, applying too much force horizontally may cause the actuator to come off. Take care that the paper does not catch the actuator when removing output.
> When a finisher is not installed, the actuator for output tray full detection may come off.
> If the actuator is not reattached, output tray full detection will not take place and output may protrude from the machine.
> If the actuator comes off, see "The actuator came off (when a finisher is not installed)" (page 4-22) in "4. TROUBLESHOOTING".
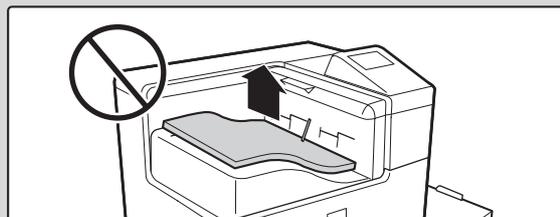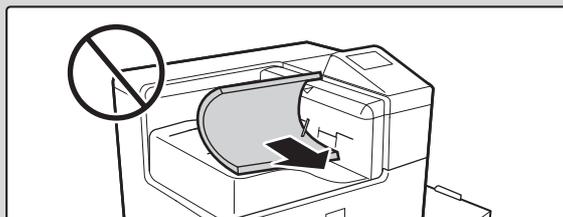

TRAY SETTINGS FOR TRAYS 1 TO 4

LOADING PAPER AND CHANGING THE PAPER SIZE

A maximum of 500 sheets of paper from size 5-1/2" x 8-1/2" to size 8-1/2" x 14" (A5 to A4) can be loaded in trays 1 and 2.
A maximum of 500 sheets of paper from size 7-1/4" x 10-1/2" to size 8-1/2" x 14" (B5 to A4) can be loaded in trays 3 and 4.

1
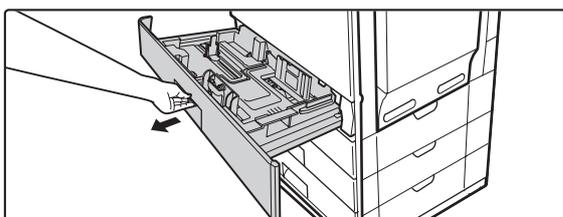
Pull out the paper tray.

Gently pull the tray out until it stops.
To load paper, go to step 3. To load a different size of paper, go to the next step.

(!) Do not pull hard on the tray. This may cause failure.

2
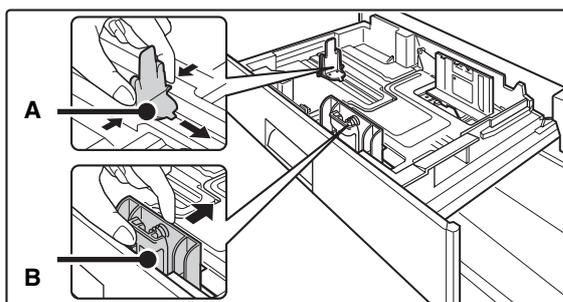
Adjust the guide plates A and B by squeezing their lock levers and sliding them to match the vertical and horizontal dimensions of the paper to be loaded.

The guide plates A and B are slidable. Slide each guide plate while squeezing its lock lever.

(!) • Be sure to place the guide to match the size of the paper. If the guide is not placed correctly, paper skewing or misfeeds may occur.
• The loaded paper should not go higher than these protrusions.
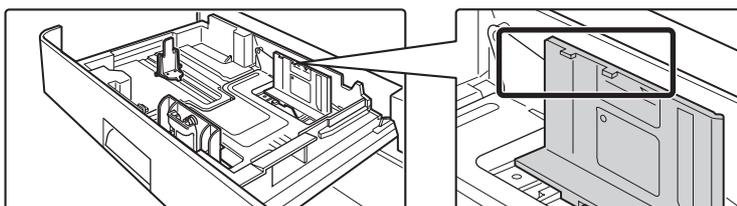
3
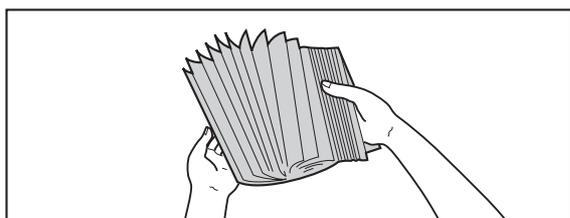
Fan the paper.

Fan the paper well before loading it. If the paper is not fanned, multiple sheets may feed at once and cause a misfeed.

(!) When handling paper, take care not to cut yourself on the edges of the paper.

4
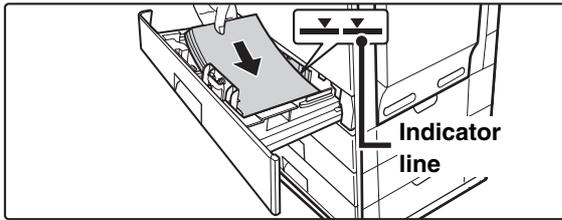
Insert the paper into the tray.

Load the paper with the print side face up. The stack must not be higher than the indicator line (maximum of 500 sheets).

Indicator line

- If paper is loaded higher than the line, paper misfeeds may occur.
- When pushing in a tray, take care that your fingers do not become pinched in the tray.

5
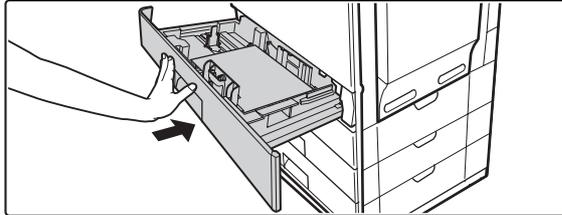
Gently push the paper tray into the machine.

Push the tray firmly all the way into the machine.

When pulling out a tray after paper is loaded, do not pull hard. The tray may be damaged, the machine may topple, and injury may result.

If you loaded a different type or size of paper than was loaded previously, be sure to change the "Paper Tray Settings" in the system settings. If these settings are not configured correctly, automatic paper selection will not operate correctly and printing may take place on the wrong size or type of paper, or a misfeed may occur.

⚠️ **Caution**

If children are present, ensure that the children do not sit or play on a tray that has been pulled out. Sitting on a tray may damage the tray and cause the machine to topple, resulting in injury.

Do not place heavy objects on the tray or press down on the tray.

System Settings: Paper Tray Settings (page 3-37)
Change these settings when you change the size or type of paper loaded in a tray.

LOADING PAPER IN THE BYPASS TRAY

The bypass tray can be used to print on plain paper, envelopes, label sheets, and other special media. Up to 100 sheets of paper can be loaded (up to 40 sheets of heavy paper) for continuous printing similar to the other trays.

1
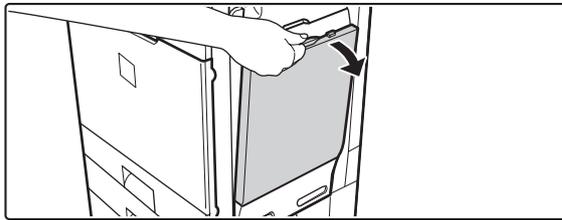
Open the bypass tray.
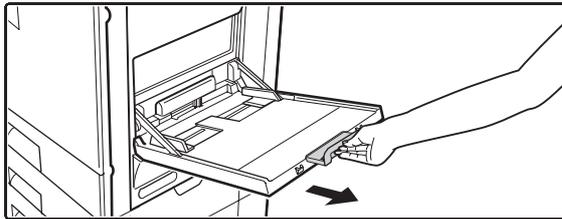
When loading paper larger than 8-1/2" x 11" or A4, be sure to pull the bypass tray extension all the way out. If the bypass tray extension is not pulled all the way out, the size of the loaded paper will not be correctly displayed.

🛈 Do not place heavy objects on the bypass tray or press down on the tray. The bypass tray may be damaged, the machine may topple, and injury may result.

2
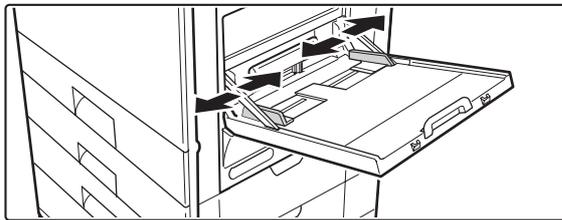
Set the bypass tray guides to the width of the paper.

3
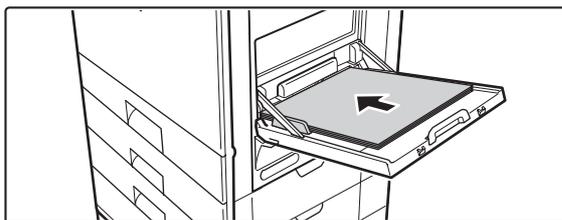
Insert the paper along the bypass tray guides all the way into the bypass tray until it stops.

Load the paper with the print side face down.

🛈 • Do not force the paper in.
• If the bypass tray guides are set wider than the paper, move the bypass tray guides in until they correctly fit the width of the paper. If the bypass guides are set too wide, the paper may skew or be creased.

⚠ **Caution**

If children are present, ensure that the children do not sit or play on a bypass tray that has been pulled out. Sitting on a tray may damage the tray and cause the machine to topple, resulting in injury.

IMPORTANT POINTS WHEN USING THE BYPASS TRAY

- When using plain paper other than SHARP standard paper or special media other than SHARP-recommended transparency film, or when printing on the reverse side of previously used paper, the paper must be loaded one sheet at a time. Loading more than one sheet at a time will cause misfeeds.
- Before loading paper, straighten any curling in the paper. If curled paper is not straightened, a misfeed may occur.
- When adding paper, remove any paper remaining in the bypass tray, combine it with the paper to be added, and reload as a single stack. If paper is added without removing the remaining paper, a misfeed may result.

## Inserting paper

Place paper in the horizontal orientation.
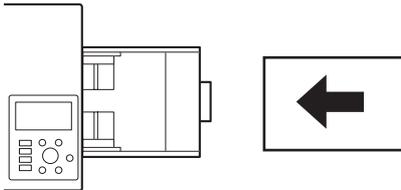
Inserting transparency film
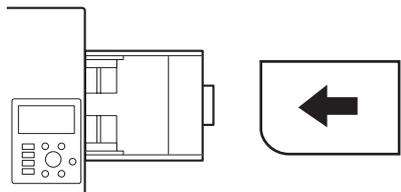
- Use SHARP-recommended transparency film. When using transparency film, place the film on the bypass tray with the rounded corner at the left front. This ensures that the print side faces in the correct direction.
- Do not touch the print side of transparency film.
- When loading multiple sheets of transparency film in the bypass tray, be sure to fan the sheets several times before loading.
- When printing on transparency film, be sure to remove each sheet as it exits the machine. Allowing sheets to stack in the output tray may result in curling.

Loading envelopes

When inserting envelopes in the bypass tray, place them aligned to the left side in the orientation shown below.
Only the front side of envelopes can be printed on. Be sure to place the front side face down.
When loading envelopes, load one envelope at a time.
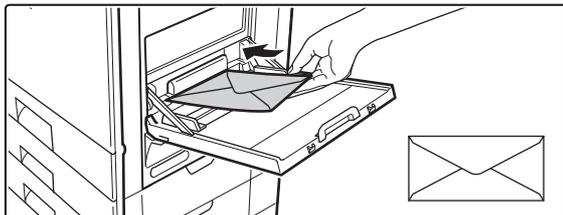
> ⚠ • Do not print on both sides of an envelope. This may result in misfeeds or poor print quality.
>
> • Some operating environments may cause creasing, smudging, misfeeds, poor toner fusing, or machine failure.

Important points when using envelopes

Envelopes that cannot be used

Do not use the following envelopes. Envelopes misfeed, and smudges may result.

• Envelopes with metal clasps, plastic hooks, or ribbon hooks
• Envelopes closed with string
• Envelopes with windows or backing
• Envelopes with an uneven front surface due to embossing
• Double-layer envelopes
• Envelopes with an adhesive for sealing
• Hand-made envelopes
• Envelopes with air inside
• Envelopes with creases, fold marks, torn or damaged envelopes
• Envelopes with an incorrectly aligned corner gluing position on the back cannot be used as creasing may result.

Can be used

Cannot be used
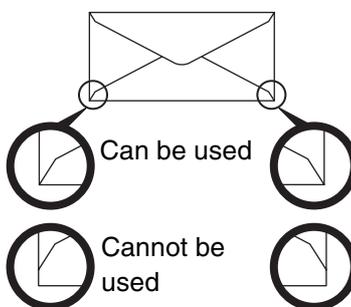
Print quality on envelopes

• Print quality is not guaranteed in the area 13/32" (10 mm) around the edges of the envelope.
• Print quality is not guaranteed on parts of envelopes where there is a large step-like change of thickness, such as on four-layer parts or parts less than three layers.
• Print quality is not guaranteed on envelopes witn adhesive for sealing.

PERIPHERAL DEVICES

This section describes the peripheral devices that can be used with the machine and explains how to use the finisher, as well as Sharp OSA.

PERIPHERAL DEVICES

Peripheral devices can be installed on the machine to increase its range of functionality.
The peripheral devices are generally optional, however, some models include certain peripheral devices as standard equipment.

(As of December, 2009)

Product name	Product number	Description
500-sheet paper feed unit	MX-CSX1	Additional tray. A maximum 500 sheets of paper can be loaded in each tray.
	MX-CSX2	
Finisher	MX-FN12	Output device that enables the use of the staple function and offset function. When a finisher is installed, be sure to attach the finisher cover (MX-CV10).
Finisher cover	MX-CV10	When a finisher is installed, this cover protects the top of the finisher.
Barcode font kit	AR-PF1	Adds barcode fonts to the machine.
XPS expansion kit	MX-PUX1	The machine can be used as an XPS compatible printer. To install this kit, a 1 GB expansion memory board (MX-SMX3) is required.
Expansion memory board	MX-SMX3	This expands the memory that can be used on the machine.

FINISHER

The finisher is equipped with the offset function, which offsets each set of output from the previous set.
In addition, each set of sorted output can be stapled.

PART NAMES

The following parts can be accessed when the finisher is open.
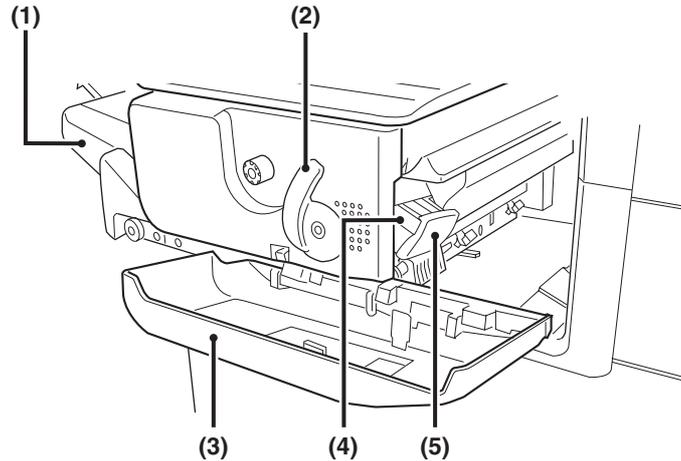
(1)   **Output tray**

Stapled and offset output is delivered to this tray.
The tray is slidable. Extend the tray for large output
(8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 13-1/2", and
8-1/2" x 13-2/5" sizes).

(2)   **Lever**

Use this to move the finisher in order to remove a paper
misfeed, replace staples, or remove a staple jam.

(3)   **Front cover**

Open this cover to remove a paper misfeed, replace
staples, or remove a staple jam.

(4)   **Staple case**

This holds the staple cartridge. Pull the case out to
replace the staple cartridge or remove a staple jam.

(5)   **Staple case release lever**

Use this to remove the staple case.

⊙   Do not place heavy objects on the finisher or press down on it.

✎   Use caution when you turn on the power and when printing is taking place, as the tray may move up and down.

SUPPLIES

The finisher requires the following staple cartridge:

Staple cartridge
(approx. 5000 staples per cartridge x 3 cartridges)
MX-SCX1
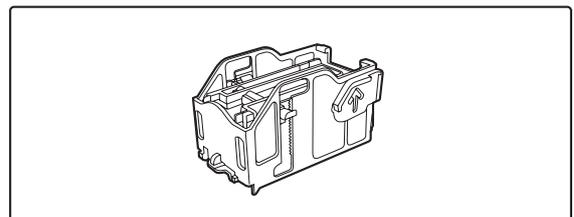
SHARP OSA

Sharp OSA (Open Systems Architecture) is an architecture that enables external applications to be directly connected to a machine over a network.
When a machine that supports Sharp OSA is used, the keys that are displayed on the operation panel and functions can be linked to an external application.
There are two types of external applications: "standard application" and "external account application". An "external account application" is used for centralized account management of a machine on a network. A "standard application" refers to all other applications.

STANDARD APPLICATION

When a previously registered standard application is selected in the Web pages of the machine, the machine retrieves the operation screen from the registered URL. Control of the operation screen is performed by the standard application.

Standard application setup

To enable a general application in the Web pages of the machine, click [Application Settings] in the administrator menu frame, and then [External Applications Settings] and [Standard Applications]. Configure settings for the standard application in the screen that appears.

Selecting a standard application

The procedure for selecting a general application that has been enabled in the Web pages of the machine is explained below.

Keys in the display can be selected with the arrow keys and the [OK] key.
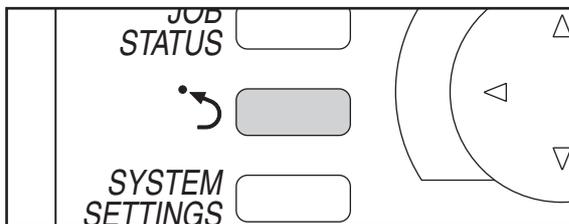
1		**Press the Sharp OSA shortcut key.**
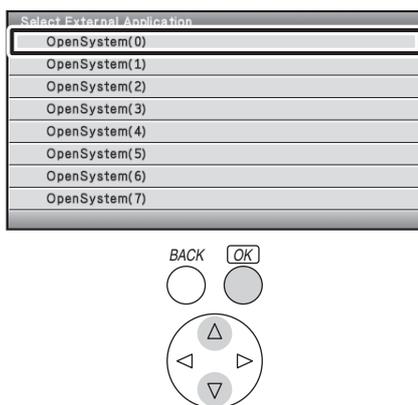
2		**Select the standard application.** If two or more standard applications have been stored in the Web pages, the screen to select the standard application will appear. Select the standard application that you wish to use. If only one standard application has been stored in the Web pages, connection to the standard application will begin.

3	**The machine connects to the standard application.**
	The message "Connecting to the external application." appears while the machine communicates with the standard application.

EXTERNAL ACCOUNT APPLICATION

An external account application can be used in "external authentication mode" or "external count mode". When external authentication mode is used, the login screen is retrieved from the application when the machine is started. When a job ends, a job notification screen is sent to the application to enable counts to be kept for each authenticated user.
When "external count mode" is used, the login screen is not displayed when the machine is started. Only a job result notification is sent to the application. User authentication by the external account application cannot be used, however, the external account application can be used in combination with the internal account function.

External account application setup

To enable an external account application in the Web pages of the machine, click [Application Settings] in the administrator menu frame, and then [External Applications Settings] and [External Accounting Application Settings]. Configure settings for the external account application in the screen that appears. The setting change will take effect after the machine is restarted. To restart the machine, see "TURNING THE POWER ON AND OFF" (page 1-13).

Operation in external account mode

The two modes for using an external account application operate as explained below.

External authentication mode

When the "Enable Authentication by External Server" checkbox is selected in "External Application Setting" in the Web page, the machine enters external authentication mode. When the machine is powered on in external authentication mode, the machine accesses the external account application and displays the login screen. The login screen also appears when the [Call] key is selected to run a job in the job status complete screen. (The login screen does not appear if the user has already logged in by the normal method.)
The [JOB STATUS] key can be pressed while the login screen appears to show the job status screen. To return to the previous state, press the mode select key.

> • The user control function of the machine cannot be used in external authentication mode.
> However, "User Registration", "User Count Display", "User Count Reset", "User Information Print", and "The Number of User Name Displayed Setting" can be used.
> • The mode select key cannot be used while the login screen appears.

If login fails

If the login screen fails to appear or the application does not operate correctly, the machine may also stop operating correctly. In this event, it is recommended that you quit external account mode from the Web pages of the machine. For more information, see [Help] in the Web pages.
To forcibly exit external account mode from the machine's operation panel, follow these steps:
Change "External Application Setting" in the Web page. Restart the machine to make the change take effect. To restart the machine, see "TURNING THE POWER ON AND OFF" (page 1-13).

External count mode

When only the "External Account Control" setting is enabled in "External Application Setting" in the Web page, the machine enters external count mode.
Unlike external authentication mode, when the machine is started in "external count mode", the login screen of the external account application is not displayed. Only the job result is sent to the external account application. External count mode can be used together with the user control function of the machine. (External count mode can also be used when the user control function is disabled.)

MAINTENANCE

This section explains how to clean the machine and replace the toner cartridges and the toner collection container.

REPLACING THE TONER CARTRIDGES

When it is time to replace a supply item, a message instructing you to replace the item will appear in the display.
When replacing a toner cartridge, carefully check the indicated color and replace the toner cartridge for that color.

> • Do not replace a supply item before the replacement message appears in the display.
> • After using up a cartridge, pack it with the packing case, packing material and bag that are used for the original cartridge.

1
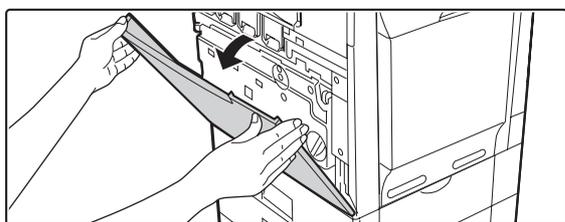
Open the front cover.

Locations of color toner cartridges

(Y)   (M)   (C)   (Bk)
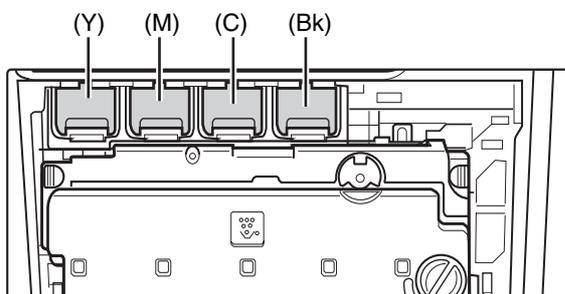
(Y): Yellow (M): Magenta
(C): Cyan (Bk): Black

2

Example: Replacing the yellow toner cartridge
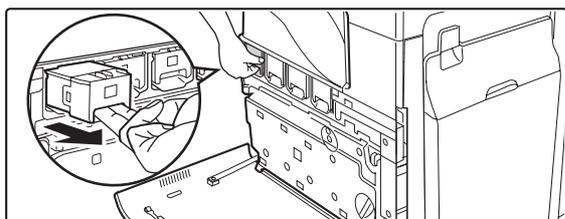
**Pull the toner cartridge toward you.**

3

Protective
material
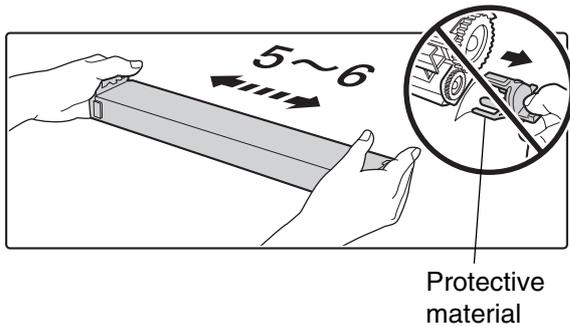
Take out the new toner cartridge, hold it with both hands, and shake 5 or 6 times horizontally.

- When shaking the toner cartridge, be sure to shake with the protective material inserted in the cartridge. If you shake the cartridge after removing the protective material, toner may spill out.
- Shake the toner cartridge only in the horizontal direction. If shaken in any other direction, toner may collect in one part of the cartridge.

4
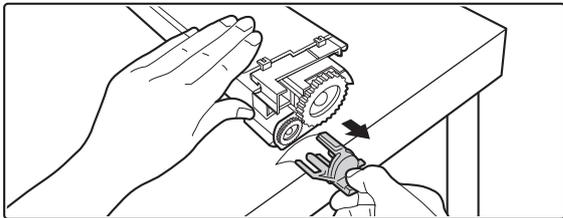
Remove the protective material from the new toner cartridge.

- Hold the toner cartridge firmly while removing the protective material.
- After the protective material has been removed, do not point the toner cartridge down or shake it. Toner may spill out.

5
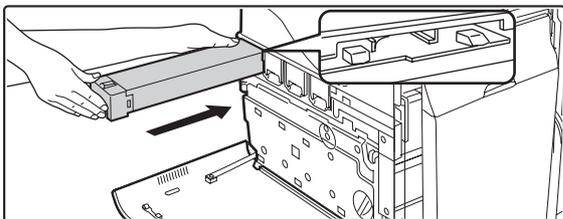
Insert the new toner cartridge horizontally and push it firmly in.

The shape of the toner cartridge varies by color. Insert in the same location as the toner cartridge that was removed.

6
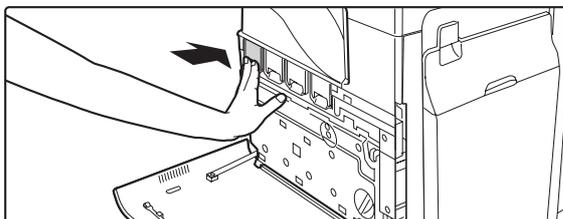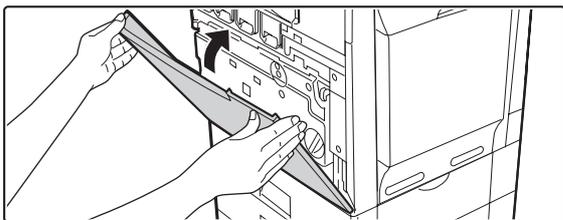
Close the front cover.

- Before moving the machine, remove the toner cartridge. Moving the machine with the toner cartridge installed may cause a failure.
- When the developer cartridge has been removed, do not remove or insert the toner cartridge. This may cause a failure.
- After the toner cartridge is replaced, the machine automatically enters image adjustment mode. Image adjustment will not take place if the cover is not closed.
- Take care that your fingers are not pinched when closing the cover.

⚠ Caution

- **Do not throw a toner cartridge into a fire. Toner may fly and cause burns.**
- **Store toner cartridges out of the reach of small children.**

- Store the box that contains the toner cartridge horizontally; do not store it standing up. If the toner cartridge is stored standing up, the toner may solidify inside the cartridge.
- Store the toner in a location that is cooler than 104°F (40°C). Storage in a hot location may cause the toner in the cartridge to solidify.
- If a toner cartridge other than a SHARP-recommended toner cartridge is used, the machine may not attain full quality and performance and there is a risk of damage to the machine. Be sure to use a SHARP-recommended toner cartridge.
- Place the old toner cartridge in the bag that contained the new toner cartridge, seal the bag, and place it in the box.

- Keep the used toner cartridge in a plastic bag (do not discard it).
- To view the approximate amount of toner remaining, continually touch the [PRINT] key during printing or when the machine is idle. The percentage of toner remaining will appear in the display while the key is touched. When the percentage falls to "25-0%", obtain a new toner cartridge and keep it ready for replacement. When the remaining toner falls to "25-0%", colors in the output may be faint or partially missing when an image with dark colors is printed.

```
Total Count           B/W:00,000,000
               Full Color:00,000,000
                  2-color:00,000,000
             Single color:00,000,000

Toner Quantity       [Bk]:100-75%
                      [C]:100-75%
                      [M]:100-75%
                      [Y]:100-75%
```

REPLACING THE TONER COLLECTION CONTAINER

The toner collection container collects excess toner that is produced during printing.
When it is time to replace a supply item, a message instructing you to replace the item will appear in the display. Follow the procedure below to replace the toner collection container.

> • Do not subject the toner collection container to shock. The amount of collected toner may be incorrectly detected and cause machine failure.
>
> • Do not replace a supply item before the replacement message appears in the display.
>
> • Toner may spill when the toner collection container is replaced. Before replacing the toner collection container, take measures such as placing covers on and around the machine to prevent soiling.
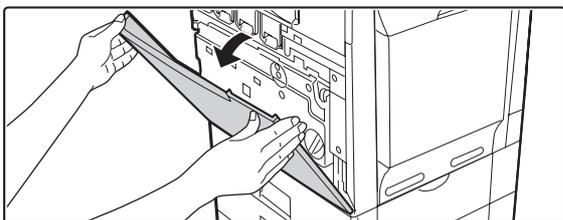
1		**Open the front cover.**
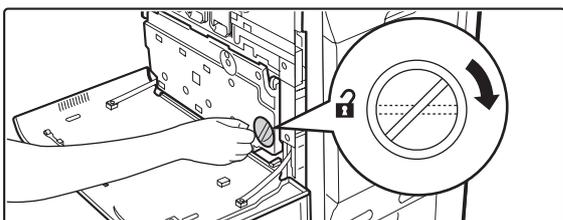
|		
2		**Release the used toner collection container.** (1) **Turn the toner collection container lock lever to the right until it is horizontal.** (2) **Tip the toner collection container forward.** Grasp the toner collection container with both hands at the marks on the upper right and lower left of the container and slowly tip the container toward you.
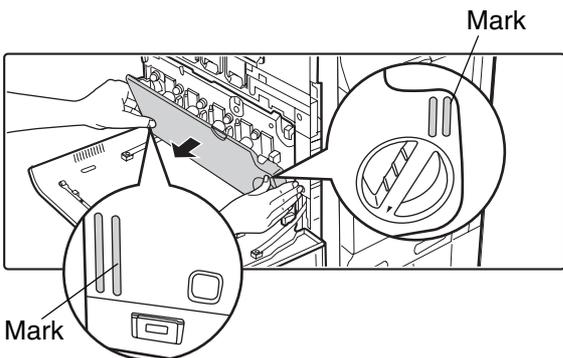
Mark

Mark

1-52

3
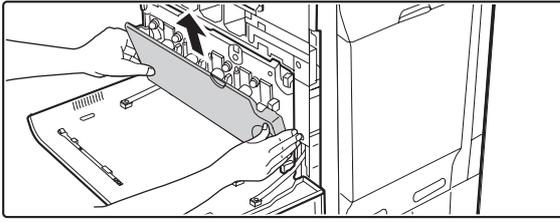
Remove the toner collection container.

⚠ • If the toner collection container is tipped forward too far, it will not be possible to remove it.
• Do not point the holes down as used toner will spill out.

✎ • Hold the container by both hands and lift it up slowly.
• Do not discard the toner collection container. Place it in a plastic bag and keep it until it is collected by a service.

4
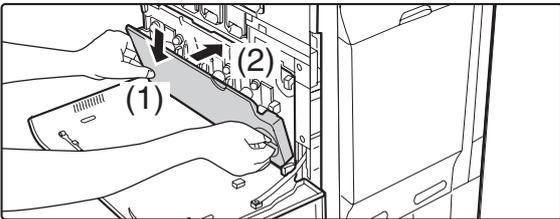
Install the new toner collection container.

Insert the container from above at a slant. (The direction opposite to when you removed it.)

5
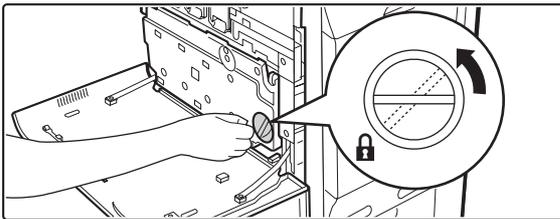
Turn the lock lever on the toner collection container to the left.

Turn the lock lever to the left until it stops.

⚠ If the lock lever does not turn, check if the toner collection container is installed correctly. In particular, make sure that the top left corner of the toner collection container is correctly in place.

6
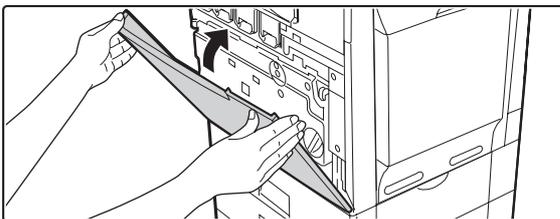
Close the front cover.

⚠ Take care that your fingers are not pinched when closing the cover.

> ⚠ **Caution**
>
> - **Do not throw the toner collection container into a fire. Toner may fly and cause burns.**
> - **Store the toner collection container out of the reach of small children.**

> 🖉
> - Place the old toner collection container in the bag that contained the new toner collection container, seal the bag, and place it in the box.
> - Toner may spill when the toner collection container is replaced. Take measures so that there will be no problem if toner spills on the machine, around the machine, or on your clothes.
> - Do not touch the part soiled with toner of the removed toner collection container. If you accidentally touch the toner, immediately wash your hands.

REPLACING THE DEVELOPER CARTRIDGE / DRUM CARTRIDGE

Before replacing the developer cartridge or drum cartridge, turn off the main power of the machine and wait briefly.

REPLACING THE DEVELOPER CARTRIDGE

When it is time to replace a supply item, a message instructing you to replace the item will appear in the display. When replacing a developer cartridge, carefully check the indicated color and replace the developer cartridge for that color.
It is also necessary to remove the developer cartridge in order to replace the drum cartridge. Refer to the procedure below to remove the developer cartridge when replacing the drum cartridge.

> ⓘ Do not replace a supply item before the replacement message appears in the display.

1
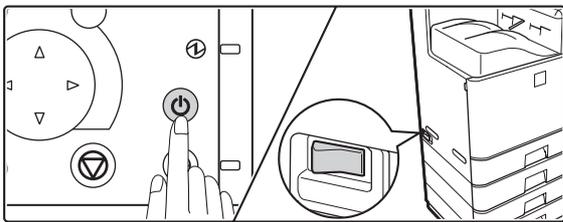
Press the [POWER] key (⏻) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.

2

Open the front cover and remove the toner collection container.

☞ REPLACING THE TONER COLLECTION CONTAINER (page 1-52)

- -
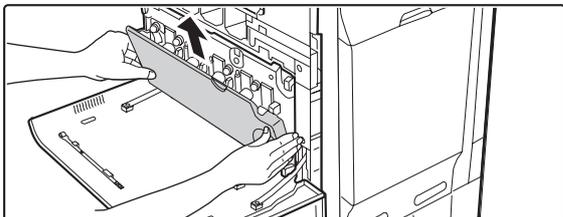
> ⓘ Do not point the holes down as used toner will spill out.

3
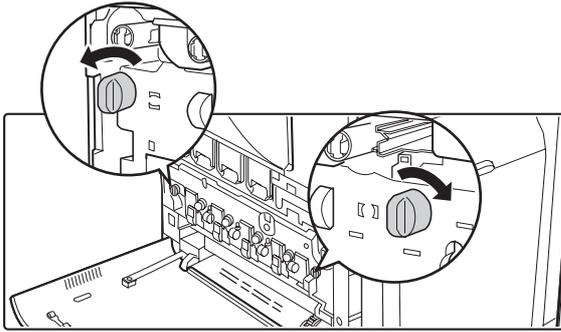
Open the main charger cover.

(1) Turn the main charger cover lock levers in the direction of an arrow below.

When the lock levers are horizontal, the lock is released.
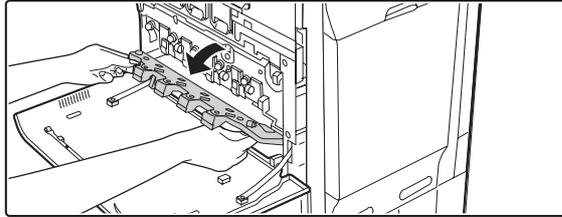
(2) Grasp the lock levers and tip the cover forward.

4
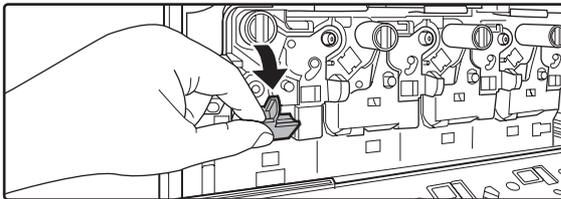
Remove the developer cartridge.

(1) Grasp the developer cartridge lock and pull it forward and down.
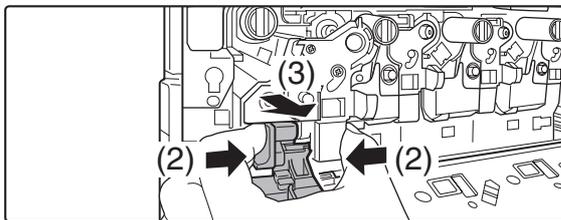
(2) Squeeze the lever on the developer cartridge

(3) Pull the developer cartridge out horizontally.

Roller
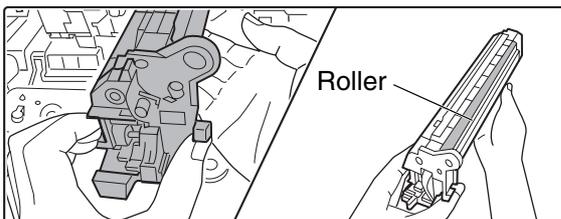
(4) Support the developer cartridge near the middle with your hand and completely remove the developer cartridge.

- When removing the developer cartridge, grasp it with both hands at the middle.
- Try to keep the developer cartridge horizontal as you remove it. If tipped during removal, developer may spill out.
- There will be toner on the roller area of the removed developer cartridge. Do not touch the roller area. If you accidentally touch the toner, immediately wash your hands.
- Place the old developer cartridge in the bag that contained the new developer cartridge, seal the bag, and place it in the box.

5

Protective material
5~6
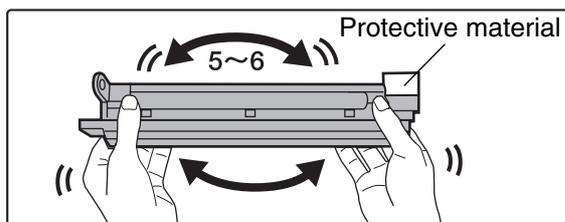
Shake the new developer cartridge 5 or 6 times as shown.

Hold the developer cartridge firmly as shown below and shake forward and back, left and right.
Remove the protective material after shaking the developer cartridge.

- **The part of the developer cartridge shown in the next illustration is easily deformed or damaged. Do not touch this part when handling the cartridge.**
- **Do not touch the roller in the developer cartridge.** If the roller is accidentally touched, image problems may result. In that case, replace the developer cartridge with a new cartridge.
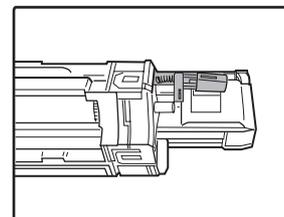
- The seal must not be removed when shaking the new developer cartridge.
- Take care not to damage the developer cartridge when shaking it. If damaged, the developer in the cartridge may leak out.
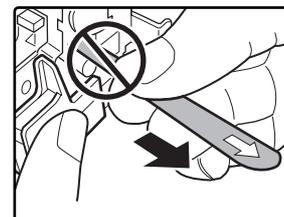

6
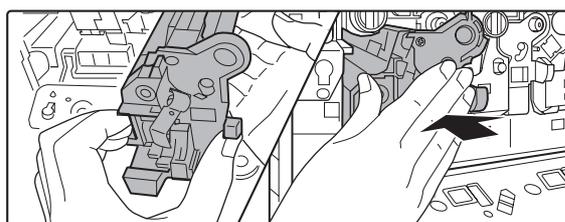
Insert the new developer cartridge horizontally.

Insert the new developer cartridge in the same location as the cartridge that was removed.

- Do not tilt the developer cartridge or insert it in the wrong direction or orientation. This may damage the developer cartridge or drum cartridge and cause failure.
- When inserting the developer cartridge, grasp it with both hands at the middle.
- Do not remove the seal from the developer cartridge until the cartridge is installed in the machine. If the seal is removed when the cartridge is not locked, the cartridge may fall out of the machine.

Insert with the arrow on the cartridge aligned with the arrow on the machine.

7

Detach the end of the seal from the developer cartridge.

Align the notch in the seal with the tab on the attachment part and pull up. Be careful not to completely remove the seal by pulling too hard.

1-57

8
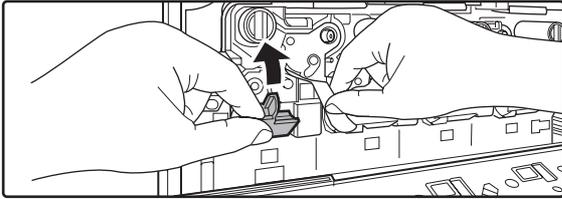
Grasp the developer cartridge lock and replace it on the machine.

9
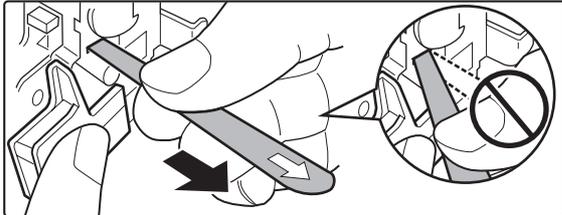
Hold the developer cartridge with one hand and slowly remove the seal with the other hand.

Slowly pull the seal straight and horizontally out.

- -

(!) If excessive force is used or the seal is pulled out diagonally, it may tear.

(✎) There is a mark (red belt) on the end of the seal. After removing the seal, be sure to verify that the mark (red belt) is on the end of the seal.
If the seal has been cut on the developer cartridge, the cartridge cannot be used. Replace with a new developer cartridge.

10
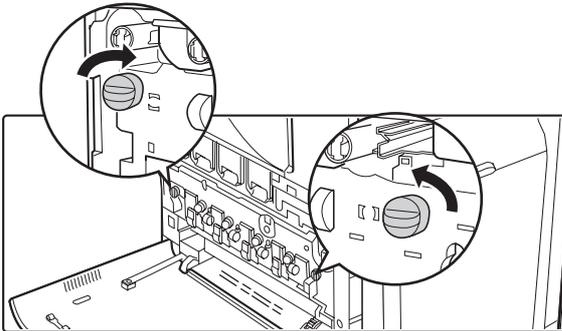
Close the main charger cover and rotate the lock levers in the direction of the arrows to lock the cover.

When the lock levers are vertical, the cover is locked.

11
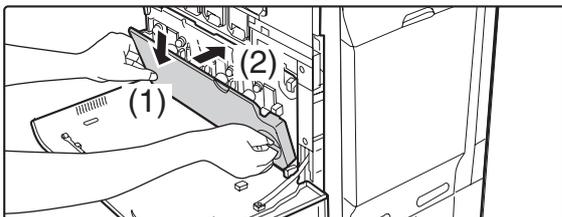
Install the toner collection container.

☞ REPLACING THE TONER COLLECTION CONTAINER (page 1-52)

1-58

12

Close the front cover.

Take care that your fingers are not pinched when closing the cover.

13
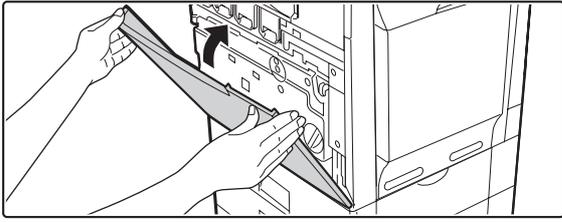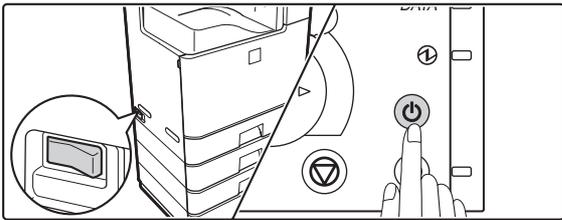
Turn on the power.

Switch the main power switch "ON" and press the [POWER] key ( ) on the operation panel to turn on the operation panel power.

⚠ Caution

- **Do not throw the developer cartridge into a fire. Toner may fly and cause burns.**
- **Store the developer cartridge out of the reach of small children.**

- When replacing the developer cartridge, be aware that it may soil your clothes or the immediate surroundings.
- Do not touch the part soiled with toner of the removed toner collection container. If you accidentally touch the toner, immediately wash your hands.

REPLACING THE DRUM CARTRIDGE

When it is time to replace a supply item, a message instructing you to replace the item will appear in the display. When replacing a drum cartridge, carefully check the indicated color. If black is indicated, replace the drum cartridge for black. If cyan, magenta, or yellow is indicated, replace the drum cartridge for color.

> • Do not replace a supply item before the replacement message appears in the display.
> • Do not leave the drum cartridge outside of its package for a long time, and do not remove cartridge from its package in a location where there is bright sunlight or bright light. This may cause a failure.
> • When you remove a drum cartridge, place it in a dark location and do not allow light to shine on the cartridge.

1

Turn off the power and remove the developer cartridge.

For the procedure for removing the developer cartridge, see steps 1 to 4 of "REPLACING THE DEVELOPER CARTRIDGE" (page 1-55).

- -

To remove the drum cartridge, the developer cartridge must first be removed.

Drum cartridge alignment mark on machine

Drum cartridge

Developer cartridge
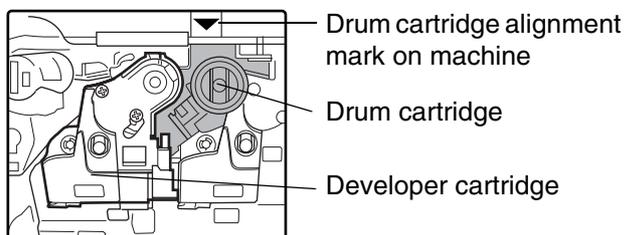
2
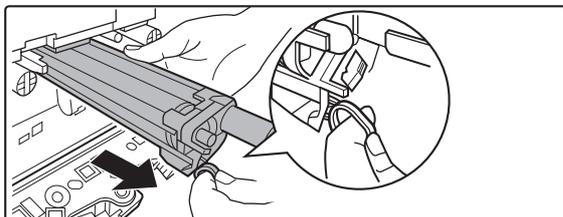
Hold down the lever on the drum cartridge with your finger and pull the drum cartridge toward you.

Place one hand at the middle of the drum cartridge and pull out with both hands.

- -

• Do not touch toner on the old drum cartridge. If you accidentally touch the toner, immediately wash your hands.
• Place the old drum cartridge in the bag that contained the new drum cartridge, seal the bag, and place it in the box.

3

Drum cartridge alignment mark on machine

Drum cartridge alignment mark

Right Hand

Drum

Left Hand
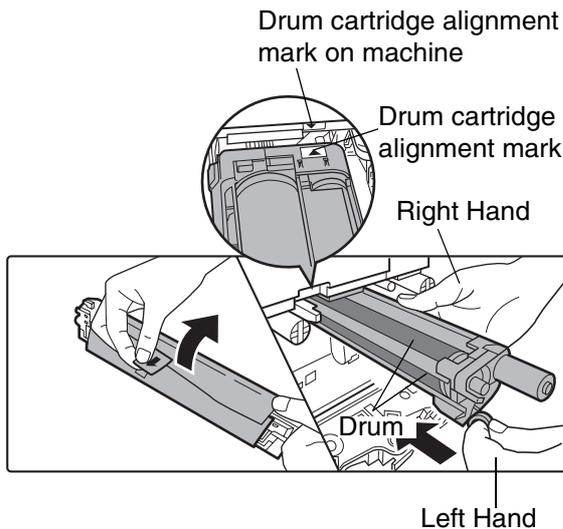
Remove the protective material from the drum cartridge and slowly insert the drum cartridge along the guides.

Make sure that the ▲ mark on the drum cartridge is aligned with the ▼ mark on the machine as you insert the drum cartridge.

- To remove the protective material, slowly pull it straight out so that it does not tear.
- **When installing the drum cartridge, do not touch or damage the drum.** This may cause a failure.
- After removing the protective material, immediately insert the drum cartridge in the machine. Do not allow the drum cartridge to be directly exposed to sunlight or electric light.
- Do not tilt the drum cartridge or insert it in the wrong direction or orientation. This may damage the drum cartridge or cause a failure.

Make sure that the colors on the new drum cartridge and the insertion label match.

4

Replace the developer cartridge and toner collection container, close the front cover of the machine, and turn on the power.

For the procedure for replacing the developer cartridge and toner collection container, see steps 7 to 8 and steps 10 to 11 of "REPLACING THE DEVELOPER CARTRIDGE" (page 1-55).

REPLACING THE STAPLE CARTRIDGE IN THE FINISHER

When the staple cartridge runs out of staples, a message will appear in the operation panel. Follow the procedure below to replace the staple cartridge.

1
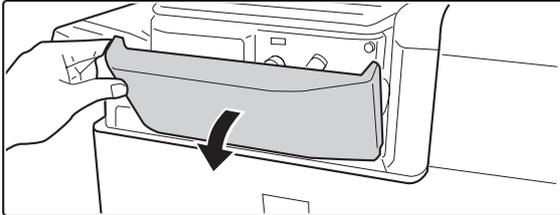
Open the cover.

2
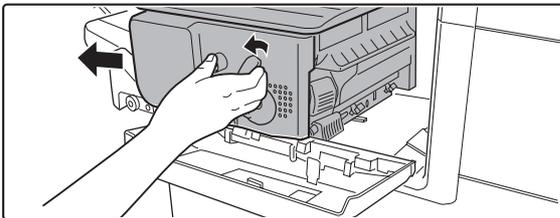
While pressing the lever over to the left, slide the finisher to the left until it stops.

Gently slide the finisher until it stops

3
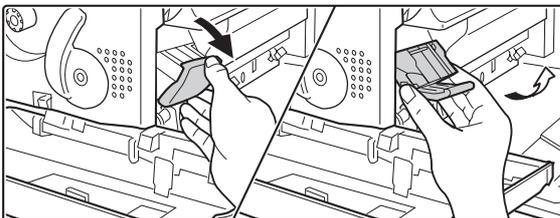
Lower the staple case release lever and remove the staple case.

Pull the staple case out to the right

4
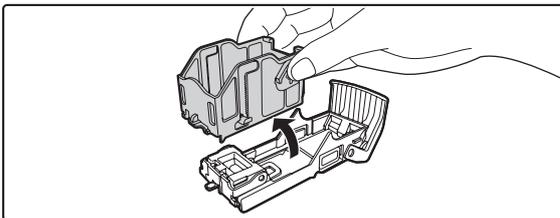
Remove the empty staple cartridge from the staple case.

Gently grasp the right side of the staple cartridge as shown and lift to the left and up. The lock will release easily. After the lock releases, continue lifting the staple cartridge to the left and up to remove it.

• Even when a message appears in the operation panel, staples may occasionally remain in the staple cartridge.
• If staples remain, the lock will not release easily. Forcing the lock to release may deform the staple case and staple cartridge, causing failure.

5
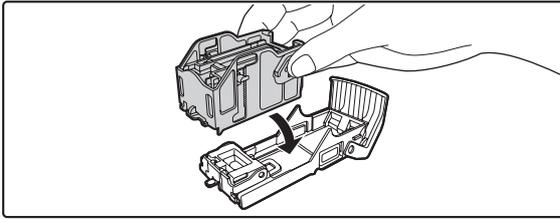
Insert a new staple cartridge into the staple case as shown.

Push the staple cartridge in until it clicks into place.

6

Replace the staple case.
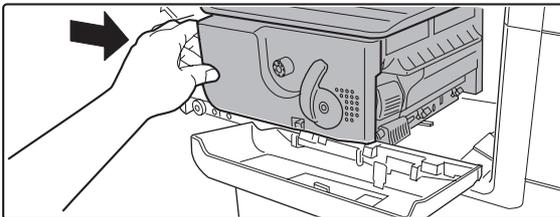
Push the staple case in until it clicks into place.

7

Slide the finisher back to the right.

Gently slide the finisher back to the right until it locks into its original position.

⊘ Take care that your fingers are not pinched when closing the cover.

8
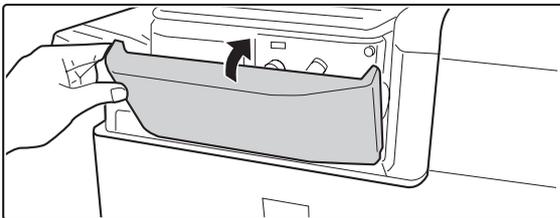
Close the cover.

⊘ Take care that your fingers are not pinched when closing the cover.

✎ Make a test print in staple sort mode to verify that stapling takes place correctly.

REGULAR MAINTENANCE

To ensure that the machine continues to provide top quality performance, periodically clean the machine.

⚠️**Caution**

Do not use a flammable spray to clean the machine. If gas from the spray comes in contact with hot electrical components or the fusing unit inside the machine, fire or electrical shock may result.

🛈 Do not use thinner, benzene, or similar volatile cleaning agents to clean the machine. These may degrade or discolor the housing.

CLEANING THE MAIN CHARGER OF THE PHOTOCONDUCTIVE DRUM

If black lines or colored lines appear, use the charger cleaner to clean the main charger.

✎ A replacement main charger cleaner is included with the drum cartridge (black). When you replace the drum cartridge (black), replace the main charger cleaner as well.

1		**Press the [POWER] key (⏻) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.**
2		**Open the front cover and remove the toner collection container.** ☞ REPLACING THE TONER COLLECTION CONTAINER (page 1-52)
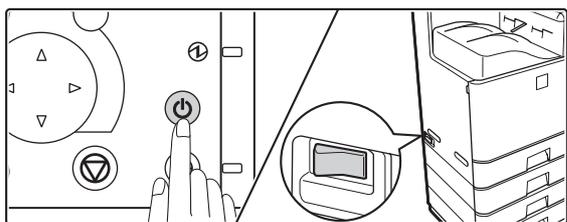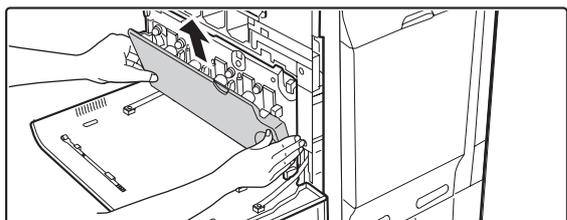
🛈 Do not point the holes down as used toner will spill out.

3
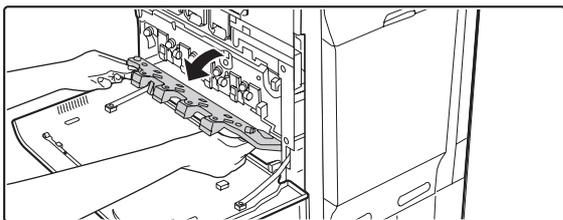
Release the lock levers and open the main charger cover.

☞ REPLACING THE DEVELOPER CARTRIDGE (page 1-55)

4
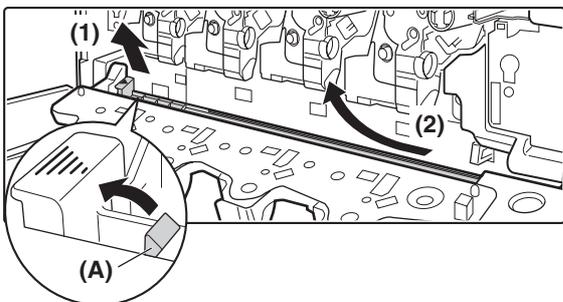
Remove the charger cleaner.

(1) Flip down the charger cleaner lock (A) in the direction of the arrow, and lift the left end of the charger cleaner.

(2) Move the charger cleaner to the left and pull it out.

5
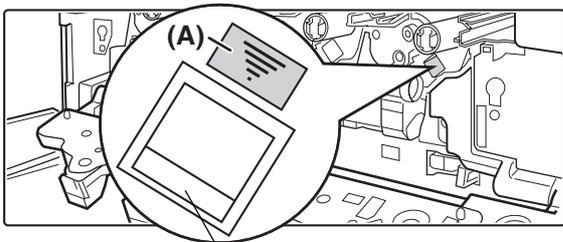
Clean the main charger.

Holes to be cleaned by the charger cleaner are indicated by labels similar to (A).

Position of mark
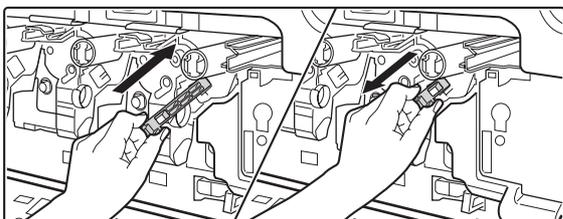
(1) Gently push the charger cleaner all the way in.

(2) Gently pull the charger cleaner out.

(3) Repeat the above (1) to (2) three times.

Take care not to let the tip of the charger cleaner become soiled by toner.

- Clean with the mark (☰) on the charger cleaner facing down.
- Do not use the charger cleaner for any purpose other than cleaning the main charger.

1-65

6
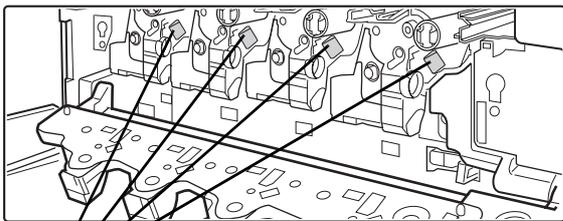
Main charger

Repeat step 5 with each of the other main chargers.

There are a total of 4 places to be cleaned in the machine as shown.

7

(2)

(1)
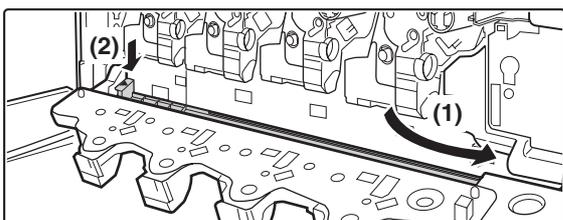
Replace the charger cleaner in its original position.

Insert the tip of the charger cleaner in toward the right and then press down on the end of the charger cleaner. The charger cleaner will lock into place.

8
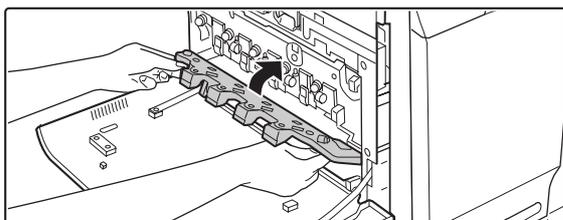
Close the main charger cover and rotate the lock levers in the direction of the arrows to lock the cover.

☞ REPLACING THE DEVELOPER CARTRIDGE (page 1-55)

9
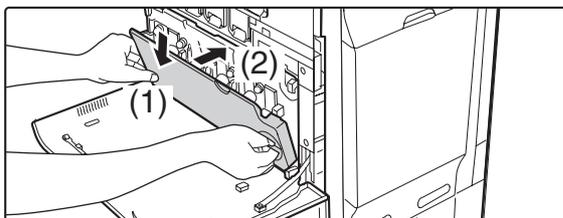
(2)

(1)

Install the toner collection container.

☞ REPLACING THE TONER COLLECTION CONTAINER (page 1-52)

10
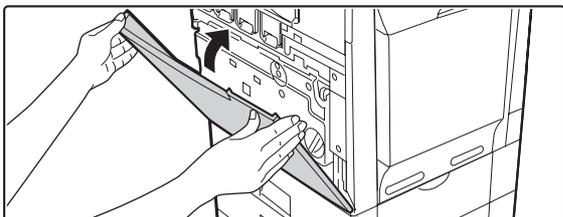
Close the front cover.

11
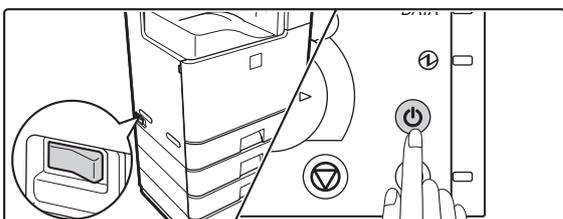
Turn on the power.

Switch the main power switch "ON" and press the [POWER] key (⏻) on the operation panel to turn on the operation panel power.

CLEANING THE BYPASS FEED ROLLER

If you find that paper fed from the bypass tray misfeeds or is soiled by the roller, clean the roller.
Before starting, remove the paper from the bypass tray.

1
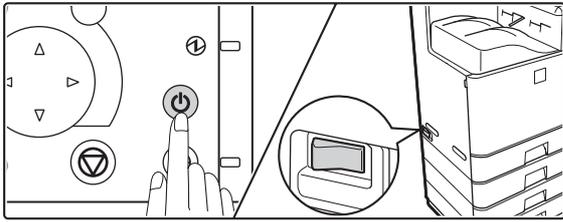
Press the [POWER] key (⏻) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.

2
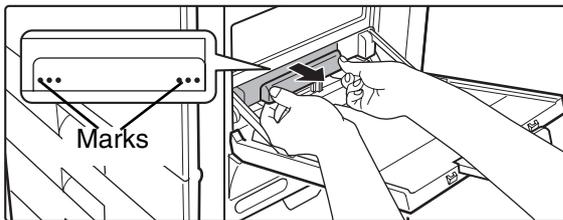
Marks

Remove the roller cover from the bypass tray.

Place your fingers behind the ••• marks on the roller cover and pull straight toward you. Pull alternately on the left and right side of the roller cover.

3
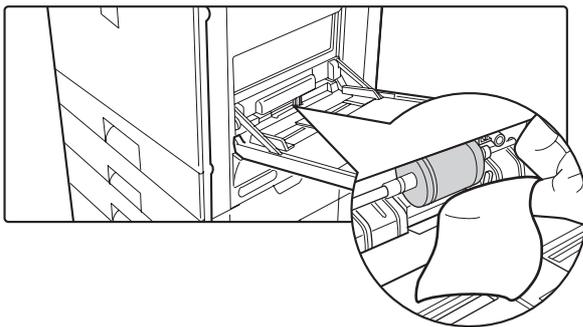
To clean the rollers, wipe each roller with a clean cloth.

⚠ **Caution**

When cleaning the rollers, be careful not to injure your hands.

🛈 Do not touch the surface of the roller if your hands are dirty.

✐ If the dirt is difficult to remove, moisten the cloth with a small amount of water or neutral detergent, and then wipe with a clean, dry cloth until no moisture remains.

4
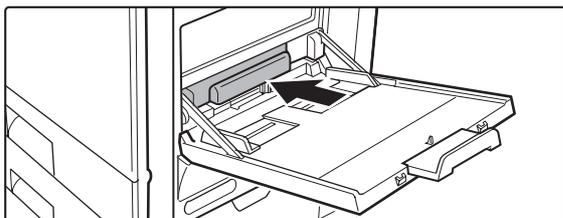
Attach the roller cover on the bypass tray.

Press the cover onto the bypass tray so that it locks into place.

5
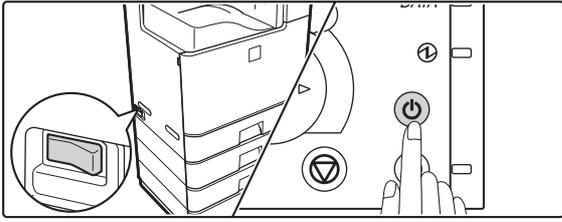
Turn on the power.

Switch the main power switch "ON" and press the [POWER] key (⏻) on the operation panel to turn on the operation panel power.

CLEANING THE LASER UNIT

When the laser unit inside the machine becomes dirty, line patterns (colored lines) may form in the printed image. Follow the steps below to clean the laser unit.

> ✎ **Identifying lines (colored lines) caused by a dirty laser unit**
> • Colored lines always appear in the same place. (The lines are never black.)
> • The colored lines are parallel to the direction of paper feeding.
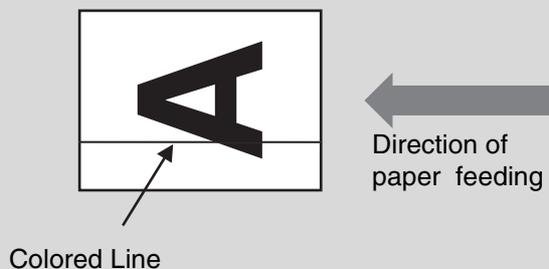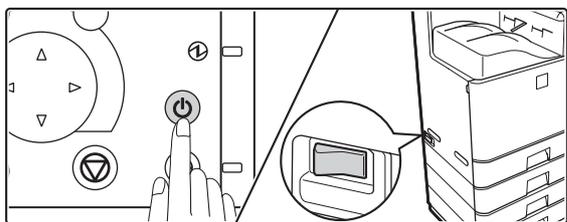
Direction of paper feeding

Colored Line

| 1 | | **Press the [POWER] key (⏻) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.** |

| 2 | | **Open the front cover and remove the toner collection container.**
☞ REPLACING THE TONER COLLECTION CONTAINER (page 1-52) |
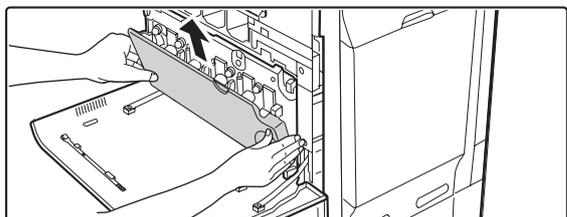
> ⊘ Do not point the holes down as used toner will spill out.
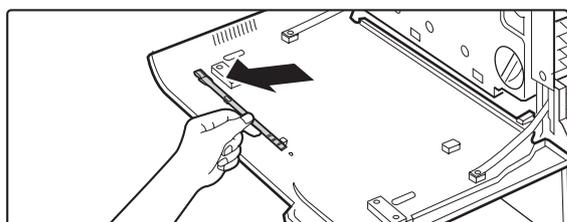
| 3 | | **Remove the cleaning tool for the writing unit from the front cover.** |

4
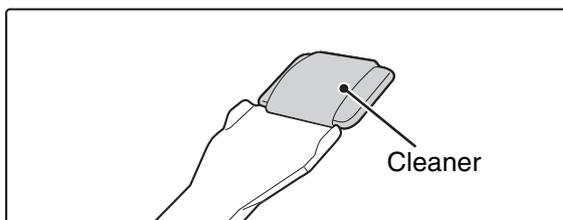
Cleaner

Make sure that the cleaner at the tip of the cleaning tool is not dirty.

If the cleaner is dirty, remove the cleaner and replace it with a clean one. For the procedure for replacing the cleaner, see steps 5 through 7. If the cleaner is not dirty, go to step 8.

5
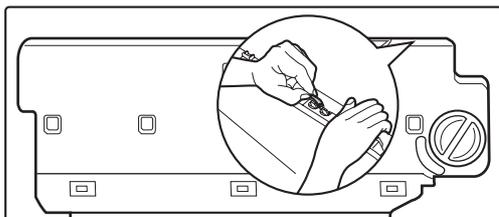
Pull out the replacement cleaner from the toner collection container.

6
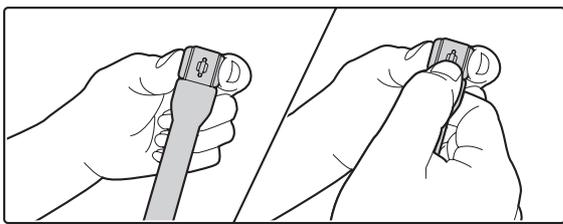
Remove the dirty cleaner.

Firmly grasp the tool close to where the cleaner is attached. Use your other hand to press down on the hook that secures the cleaner and remove the cleaner.

Return the removed cleaner to the toner collection container

7
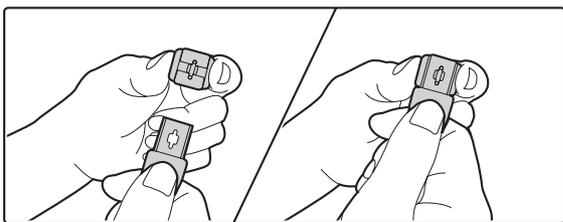
Attach the new cleaner to the cleaning tool.

Firmly grasp the tool close to where the cleaner is attached. Use your other hand to press down on the hook that secures the cleaner and remove the cleaner.

Make sure that the cleaner is firmly attached to the cleaning tool.

1-70

8
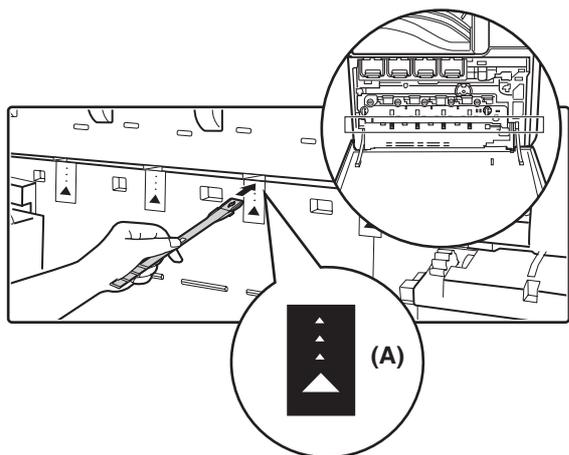
Clean the laser unit.

(1) Point the cleaner down and slowly insert the tool into the hole that you wish to clean.

The parts of the writing unit that require cleaning are indicated by labels similar to (A).

(A)
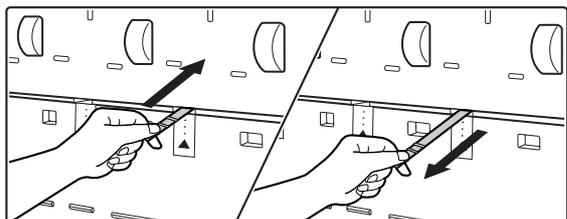
(2) Insert the cleaning tool all the way into the hole and then pull it back out.

Pull the cleaning tool out until you feel the tip of the tool leave the cleaning surface of the laser unit.
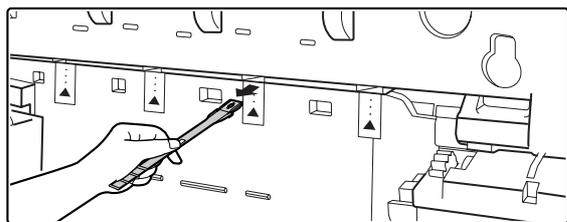
(3) Repeat step (2) two or three times and then remove the cleaning tool.

9
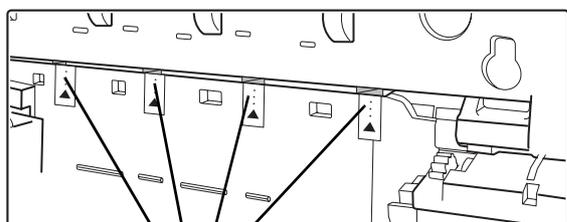
Repeat step 8 to clean all holes in the laser unit.

Holes to be cleaned

There are a total of 4 holes to be cleaned in the laser unit.
If the cleaner becomes dirty during cleaning, replace with a new cleaner. For the procedure for replacing the cleaner, see steps 5 to 7.

10
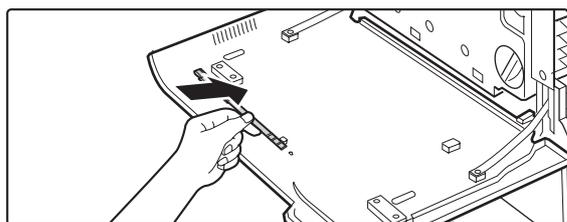
Replace the cleaning tool.

11
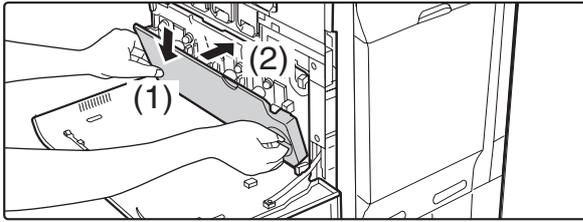
Install the toner collection container.

☞ REPLACING THE TONER COLLECTION CONTAINER (page 1-52)

12
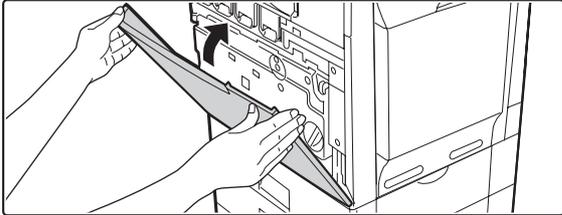
Close the front cover.

✎ Take care that your fingers are not pinched when closing the cover.

13
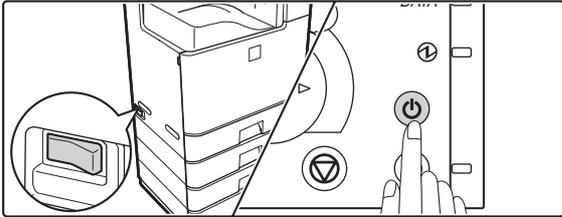
Turn on the power.

Switch the main power switch "ON" and press the [POWER] key (⏻) on the operation panel to turn on the operation panel power.

CLEANING THE PT CHARGER

If black or colored lines still remain after the main charger have been cleaned, use the PT charger cleaner to clean the PT charger.
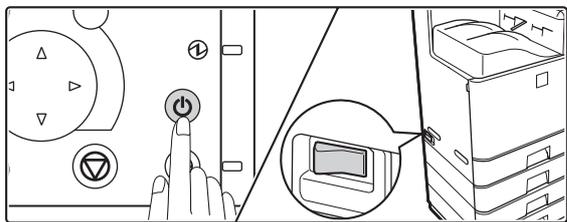
1		**Press the [POWER] key ( ) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.**
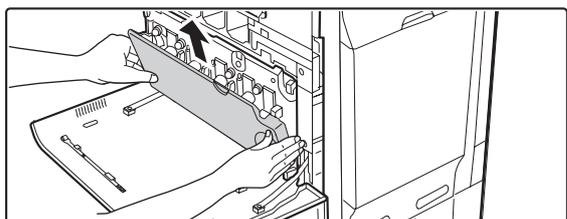
2		**Open the front cover and remove the toner collection container.** ☞ REPLACING THE TONER COLLECTION CONTAINER (page 1-52)

> ! Do not point the holes down as used toner will spill out.
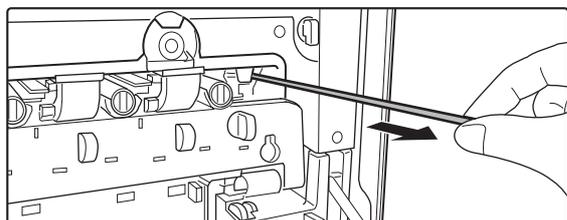
3		**Clean the PT charger.** (1) Slowly pull the PT charger cleaner out until you feel a slight resistance. (2) Slowly push the PT charger cleaner back in. (3) Repeat the above (1) to (2) three times.
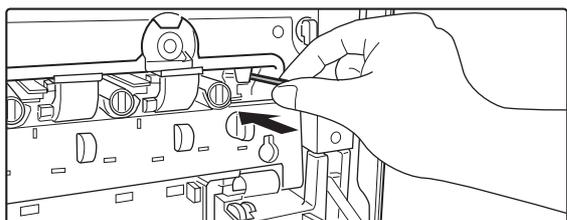
4		**Install the toner collection container.** ☞ REPLACING THE TONER COLLECTION CONTAINER (page 1-52)

5
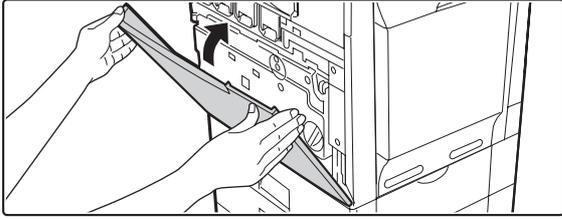
Close the front cover.

⚠ Take care that your fingers are not pinched when closing the cover.

6
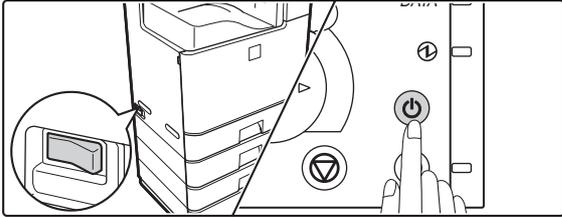
Turn on the power.

Switch the main power switch "ON" and press the [POWER] key (⏻) on the operation panel to turn on the operation panel power.

ENTERING TEXT

This section explains the text entry screen.

FUNCTIONS OF THE MAIN KEYS

Key	Description
Caps 🔒 ⇩	This key changes the text entry screen from the lower case screen to the upper case screen. The upper case screen will continue to appear until the [Caps] key is selected again so that it is no longer highlighted. The [Caps] key is convenient when you wish to enter all capital letters.
Shift ⇧	This key temporarily changes the keys in the text entry screen to upper case when lower case letters appear, or to lower case when upper case letters appear. Select a letter key after selecting the [Shift] key to enter that letter. After the letter is entered, the [Shift] key will no longer be highlighted and the original text entry screen will appear. The [Shift] key is convenient when you only need to enter one upper case letter or one lower case letter. To cancel selection of the [Shift] key, select the [Shift] key again. The [Shift] key will no longer be highlighted.
Enter ↵	Select this key to enter a line break.
←	Select this key to delete the characters to the left of the cursor one character at a time.
Space	Select this key to enter a space between letters.
AltGr	This key temporarily changes the entry screen to the accented letter and symbol entry screen. Select a letter key after selecting the [AltGr] key to enter that letter. After the letter is entered, the [AltGr] key will no longer be highlighted and the original text entry screen will appear. To cancel selection of the [AltGr] key, select the [AltGr] key again. The [AltGr] key will no longer be highlighted.
← →	These keys move the cursor left and right.
Help	Shows explanations of each key.
.com .net .org .biz .info http:	Use this key to enter a previously stored text string such as ".com". Text strings are stored in "Soft Keyboard Template Setting" in "Operation Setting" in the "System Settings" on the Web page.
Cancel	Select this key to return to the previous setting screen without entering text.
OK	Select this key to enter the text that currently appears and return to the previous setting screen.
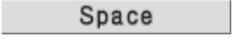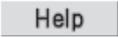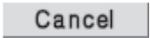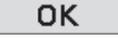
Key	Description
Search	Select this key and search results will appear based on the entered characters.
Mode	When this key is selected, the "Input Mode" screen appears.
Input mode screen	
Characters	Select this key to select character entry mode.
Symbols	Select this key to select symbol entry mode. Symbol mode is used to enter symbols and accented letters.
Other Language ...	Select this key to temporarily change the key layout of character entry mode to a different language. Select the key layout that you wish to use.
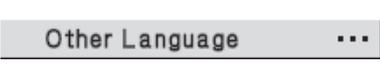
- The key layouts that can be selected vary depending on the language selected in "Display Language Setting" in the system settings (administrator).

- The following symbols cannot be used when entering a file name or folder name.
  \ ? / " ; : , < > ! * | & #
  Some computer environments may not allow the use of spaces and the symbols indicated below. For example, hyperlinks will not operate correctly or nonsense characters may appear.
  $ % ' ( ) + - . = @ [ ] ^ ` { } _ ~

CHAPTER 2 PRINTING

This chapter provides detailed explanations of the procedures for printing.

For the procedures for using the display of the machine, see "USING THE OPERATION PANEL" (page 1-8) in "1. BEFORE USING THE MACHINE".

For the procedure for accessing the Web pages, see the Quick Start Guide.

For the procedures for using the Web page, see "USING THE WEB PAGE" (page 1-12) in "1. BEFORE USING THE MACHINE".

PRINTER FUNCTION OF THE MACHINE

The machine is equipped standard with a full color printing function. To enable printing from your computer, a printer driver must be installed.

See the table below to determine which printer driver to use in your environment.

Environment	Printer driver type	Remarks
Windows	**PCL6, PCL5c** The machine supports the Hewlett-Packard PCL6 and PCL5c printer control languages. It is recommended that you use the PCL6 printer driver. If you have a problem printing from older software using the PCL6 printer driver, use the PCL5c printer driver.	Can be used in the standard machine configuration.
	PS This printer driver supports the PostScript 3 page description language developed by Adobe Systems Incorporated, and enables the machine to be used as a PostScript 3 compatible printer. (A PPD file is available if it is desired to use the Windows standard PS printer driver.)	
Macintosh		

Installing the printer driver in a Windows environment

To install the printer driver and configure settings in a Windows environment, see "2 - SETUP IN A WINDOWS ENVIRONMENT" in the Software Setup Guide.

> The explanations in this manual of printing in a Windows environment generally use the screens of the PCL6 printer driver. The printer driver screens may differ slightly depending on the printer driver that you are using.

Installing the printer driver in a Macintosh environment

To install the printer driver and configure settings in a Macintosh environment, see "3 - SETUP IN A MACINTOSH ENVIRONMENT"in the Software Setup Guide.

> In a Macintosh environment, the machine can only be used if it is connected to your network.

PRINTING FROM WINDOWS

BASIC PRINTING PROCEDURE

The following example explains how to print a document from "WordPad", which is a standard accessory program in Windows.

1
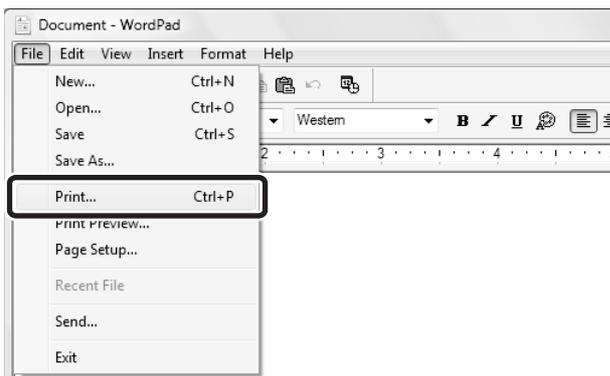
Select [Print] from the [File] menu of WordPad.

If you are using Windows 7, click the [▣▾] button.

ℹ️ The menu used to execute printing may vary depending on the software application.

2
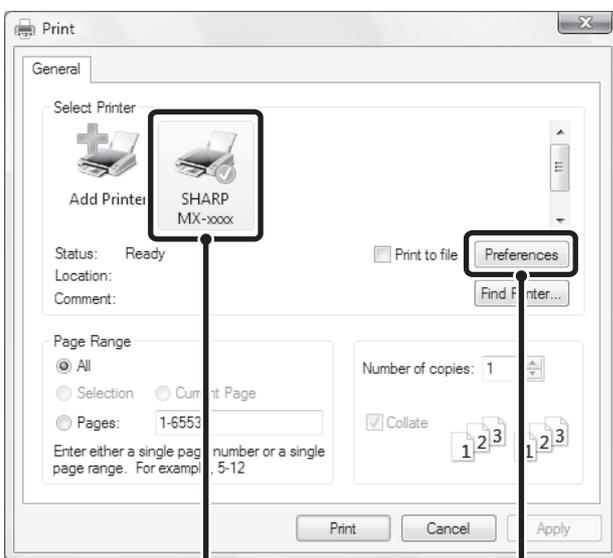
Open the printer driver properties window.

(1) Select the printer driver of the machine.
- If the printer drivers appear as icons, click the icon of the printer driver to be used.
- If the printer drivers appear as a list, select the name of the printer driver to be used from the list.

(2) Click the [Preferences] button.
- If you are using Windows 2000, the [Preferences] button does not appear. Click a tab on the "Print" dialog box to adjust the settings on that tab.
- In Windows 98/Me/NT 4.0, click the [Properties] button.

(1)   **(2)**

ℹ️ The button that is used to open the printer driver properties window (usually [Properties] or [Printing Preferences]) may vary depending on the software application.

3
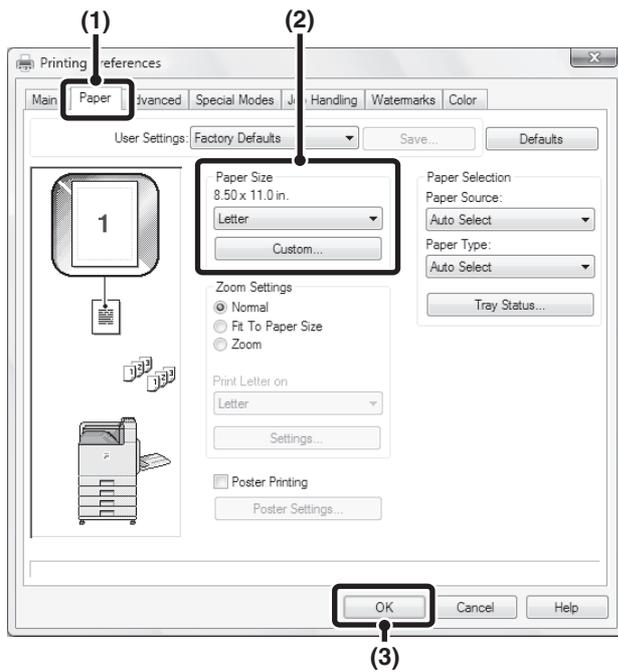
Select print settings.

(1) Click the [Paper] tab.

(2) Select the paper size.

To select settings on other tabs, click the desired tab and then select the settings.

(3) Click the [OK] button.

- Make sure the paper size is the same as the paper size set in the software application.
- Up to eight custom paper sizes can be stored. Storing a custom paper size makes it easy to specify that size each time you need to use it.
  To store a paper size, select [Custom Paper] or one of [User1] to [User7] from the pull-down menu and click the [Custom] button.

4
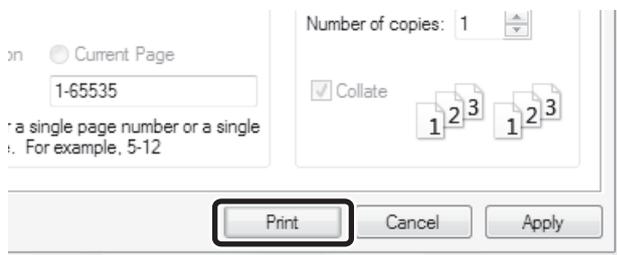
Click the [Print] button.

Printing begins.
In Windows 98/Me/NT 4.0, click the [OK] button.

When removing printed output...
Remove the output horizontally so that it does not get caught on the actuator for output tray full detection.
If the actuator comes off, see "The actuator came off (when a finisher is not installed)" (page 4-22) in "4. TROUBLESHOOTING".

SELECTING THE PAPER

This section explains how to configure the "Paper Selection" setting on the [Paper] tab of the printer driver properties window.
Before printing, check the paper sizes, paper types, and paper remaining in the machine's trays. To view the most recent tray information, click the [Tray Status] button.

- **When [Auto Select] is selected in "Paper Source"**
  The tray that has the size and type of paper selected in "Paper Size" and "Paper Type" on the [Paper] tab is automatically selected.

- **When other than [Auto Select] is selected in "Paper Source"**
  The specified tray is used for printing regardless of the "Paper Size" setting.
  When [Bypass Tray] is selected
  The "Paper Type" must also be selected. Check the bypass tray and make sure that the desired type of paper is loaded, and then select the appropriate "Paper Type" setting.

> - Special media such as envelopes can also be placed in the bypass tray. For the procedure for loading paper and other media in the bypass tray, see "LOADING PAPER IN THE BYPASS TRAY" (page 1-42) in "1. BEFORE USING THE MACHINE".
> - When "Enable Detected Paper Size in Bypass Tray" (Web page only : disabled by factory default) or "Enable Selected Paper Type in Bypass Tray" (Web page only : enabled by factory default) is enabled in the system settings (administrator), printing will not take place if the paper size or paper type specified in the printer driver is different from the paper size or paper type specified in the settings of the bypass tray.

- **When [Auto Select] is selected in "Paper Type"**
  A tray with plain paper or recycled paper of the size specified in "Paper Size" is automatically selected. (The factory default setting is plain paper only.)

- **When other than [Auto Select] is selected in "Paper Type"**
  A tray with the specified type of paper and the size specified in "Paper Size" is used for printing.

> **System Settings (Administrator): Exclude Bypass-Tray from Auto Paper Select (Web page only)**
> When [Auto Select] is selected in "Paper Selection", specify whether or not the paper in the bypass tray will be excluded from the paper that can be selected. This setting is disabled by factory default, and thus paper in the bypass tray is included in the paper that can be automatically selected. If special media are frequently loaded in the bypass tray, it is recommended that this setting be enabled.

PRINTING ON ENVELOPES

The bypass tray can be used to print on special media such as envelopes. The procedure for printing on an envelope from the printer driver properties screen is described below.

For the types of paper that can be used in the bypass tray, see "IMPORTANT POINTS ABOUT PAPER" (page 1-37) in "BEFORE USING THE MACHINE". For the procedure for loading paper in the bypass tray, see "LOADING PAPER IN THE BYPASS TRAY" (page 1-42) in "1. BEFORE USING THE MACHINE".

Select the envelope size in the appropriate settings of the application ("Page Settings" in many applications) and then perform the following steps.

(1) **Click the [Paper] tab.**

(2) **Select the envelope size from the "Paper Size" menu.**

(3) **Select [Bypass Tray] from the "Paper Source" menu of "Paper Selection".**

(4) **Select [Envelope] from the "Paper Type" menu.**

Set the paper type of the bypass tray to [Envelope] and make sure the envelope is loaded in the bypass tray.

- It is recommended that you do a test print to check the print result before using an envelope.
- In the case of media that can only be loaded in a certain orientation such as an envelope, you can rotate the image 180 degrees if needed. For more information, see "ROTATING THE PRINT IMAGE 180 DEGREES (Rotate 180 degrees)" (page 2-37).
- For more information on "Paper Selection", see "SELECTING THE PAPER" (page 2-6).

PRINTING WHEN THE USER AUTHENTICATION FUNCTION IS ENABLED

When the user authentication function is enabled, your user information (login name, password, etc.) must be entered in the printer driver properties window before you can print. The information that must be entered varies depending on the authentication method being used, so check with the administrator of the machine before printing.

1

(1)   (2)

Open the printer driver properties window from the print window of the software application.

(1) Select the printer driver of the machine.

(2) Click the [Preferences] button.

The button that is used to open the printer driver properties window (usually [Properties] or [Printing Preferences]) may vary depending on the software application.

2

(1) **(2)**

(4) **(3)**
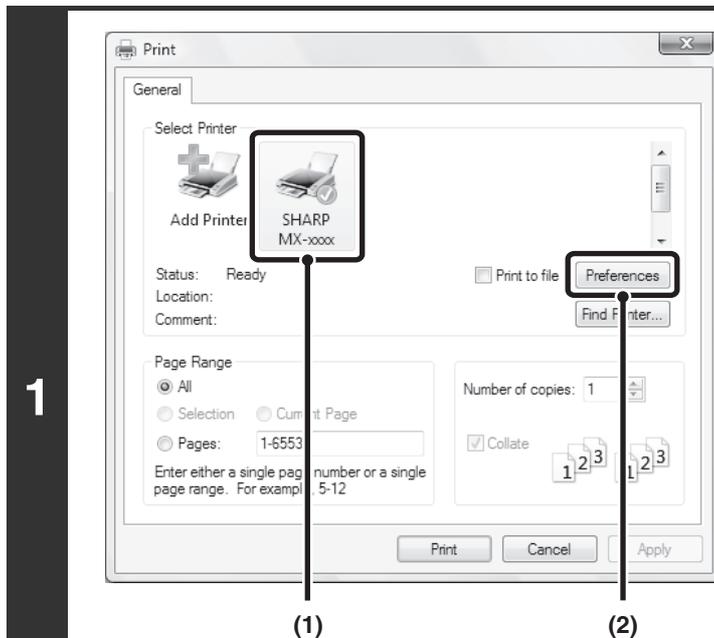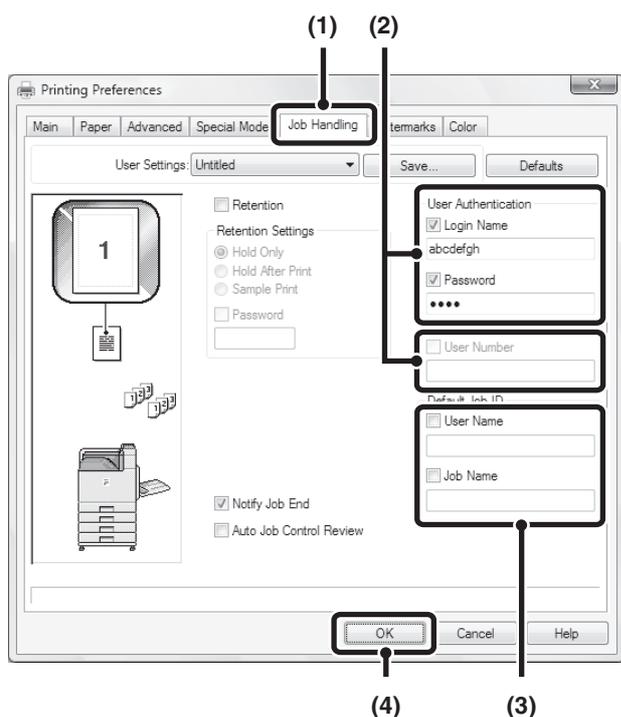
Enter your login name and password.

(1) Click the [Job Handling] tab.

(2) Enter your user information.

- **When authentication is by login name/password**
Select the [Login Name] and [Password] checkboxes so that checkmarks ☑ appear, and enter your login name and password. Enter 1 to 32 characters for the password.

- **When authentication is by user number**
Click the [User Number] checkbox ☑ and enter a user number (5 to 8 digits).

(3) Enter the user name and job name as necessary.

- **User Name**
Click the [User Name] checkbox ☑ and enter your user name (maximum of 32 characters). Your entered user name will appear at the top of the operation panel. If you do not enter a user name, your computer login name will appear.

- **Job Name**
Click the [Job Name] checkbox ☑ and enter a job name (maximum of 30 characters). The entered job name will appear at the top of the operation panel as a file name. If you do not enter a job name, the file name set in the software application will appear.

(4) Click the [OK] button.

To have a confirmation window appear before printing starts, select the [Auto Job Control Review] checkbox so that a checkmark ☑ appears.

3
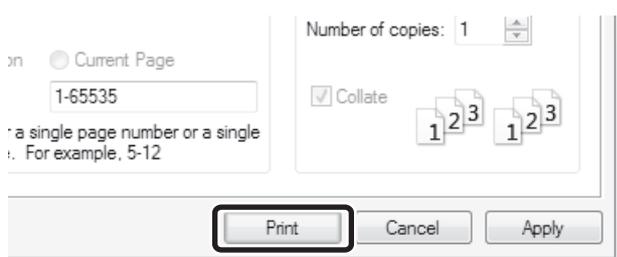
Start printing.

- When user authentication is enabled, printing is possible without entering user information if black and white printing is set in the printer driver. For black and white print settings, see "BLACK AND WHITE PRINTING" (page 2-24). The number of pages printed is added to the "Other User" count. In this case, other print functions may be restricted. For more information, ask your administrator.

- The machine's user authentication function cannot be used when the PPD file* is installed and the Windows standard PS printer driver is used. For this reason, printing will not be possible if printing by invalid users is prohibited.
* The PPD file enables the machine to print using the standard PS printer driver of the operating system.

- Disabling of Printing by Invalid User
This is used to prohibit printing of print jobs by users whose user information is not stored in the machine. When this function is enabled, printing is not allowed when user information is not entered or incorrect information is entered. This setting can be configured in [User Control] - [Default Settings] - [Disabling of Printing by Invalid User] in the Web page menu. (Administrator rights are required.)

VIEWING PRINTER DRIVER HELP

When selecting settings in the printer driver, you can display Help to view explanations of the settings.
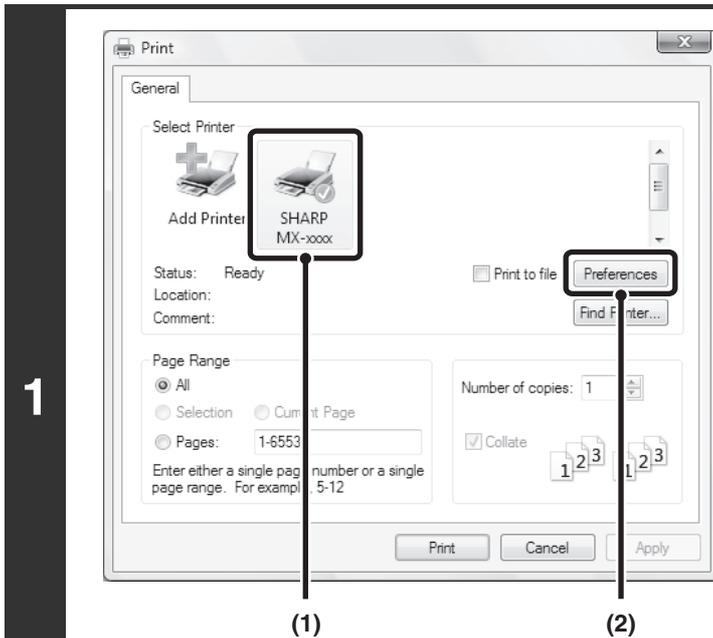
1

Open the printer driver properties window from the print window of the software application.

(1) Select the printer driver of the machine.

(2) Click the [Preferences] button.

(1)   (2)

✎ The button that is used to open the printer driver properties window (usually [Properties] or [Printing Preferences]) may vary depending on the software application.

2
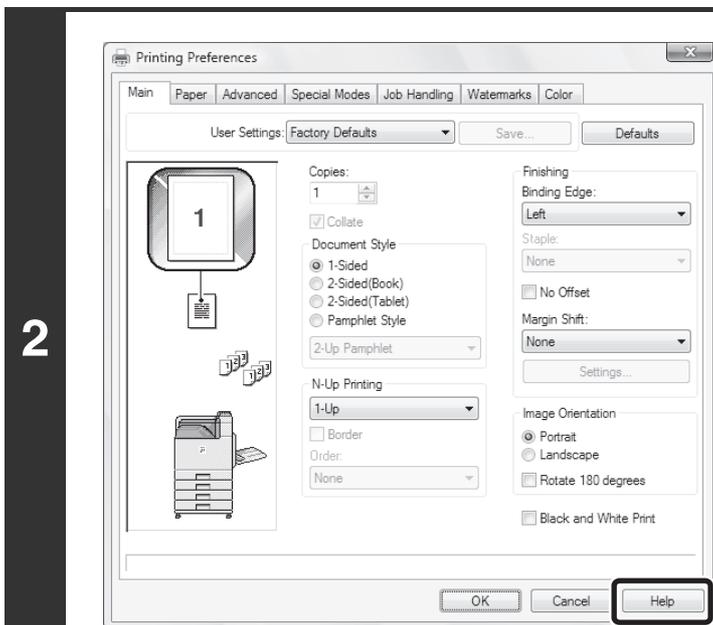
Click the [Help] button.

The Help window will open to let you view explanations of the settings on the tab.
To view Help for settings in a dialog box, click the underlined text at the top of the Help window.

Pop-up help

Help can be displayed for a setting by clicking the setting and pressing the [F1] key.
* To view Help for a setting in Windows 98/Me/NT 4.0/2000/XP/Server 2003, click the ⬚? button in the upper right-hand corner of the printer driver properties window and then click the setting.
   You can also view the same Help by right-clicking the setting and clicking the [Help] box that appears.

Information icon

Some restrictions exist on the combinations of settings that can be selected in the printer driver properties window.
When a restriction exists on a selected setting, an information icon (ⓘ) will appear next to the setting. Click the icon to view an explanation of the restriction.

SAVING FREQUENTLY USED PRINT SETTINGS

Settings configured on each of the tabs at the time of printing can be saved as user settings. Saving frequently used settings or complex color settings under an assigned name makes it easy to select those settings the next time you need to use them.

SAVING SETTINGS AT THE TIME OF PRINTING

Settings can be saved from any tab of the printer driver properties window. Settings configured on each tab are listed at the time of saving, allowing you to check the settings as you save them.

1
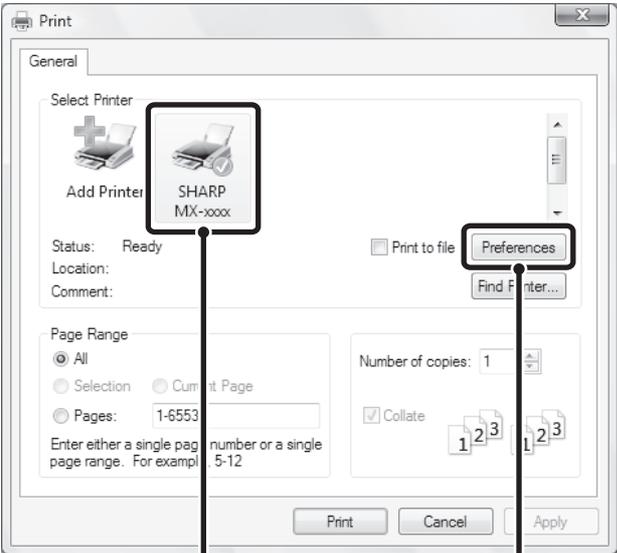
Open the printer driver properties window from the print window of the software application.

(1) Select the printer driver of the machine.

(2) Click the [Preferences] button.

The button that is used to open the printer driver properties window (usually [Properties] or [Printing Preferences]) may vary depending on the software application.
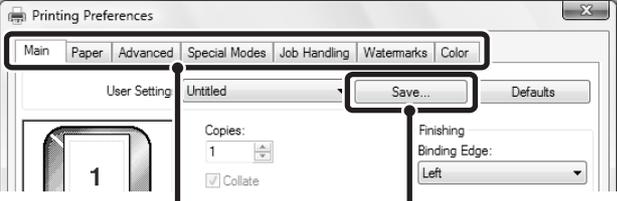
2

Save the print settings.

(1) Configure print settings on each tab.

(2) Click the [Save] button.

2-11

3
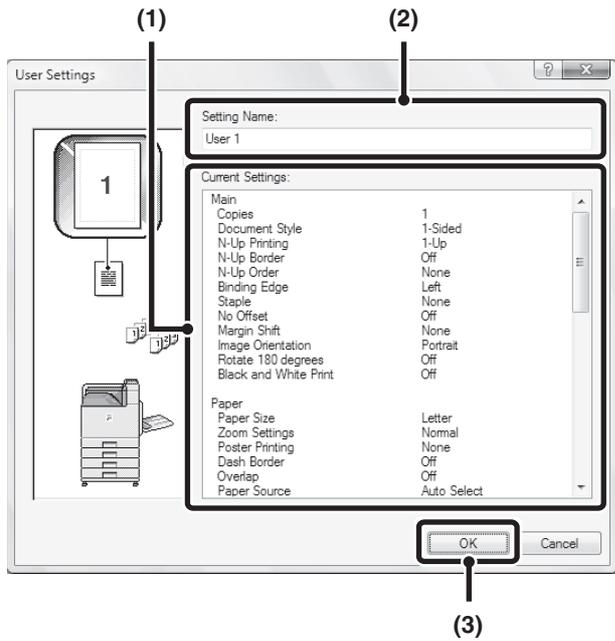
Check and save the settings.

(1) Check the displayed settings.

(2) Enter a name for the settings (maximum of 20 characters).

(3) Click the [OK] button.

4
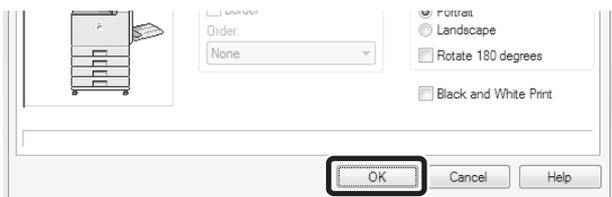
Click the [OK] button.

5
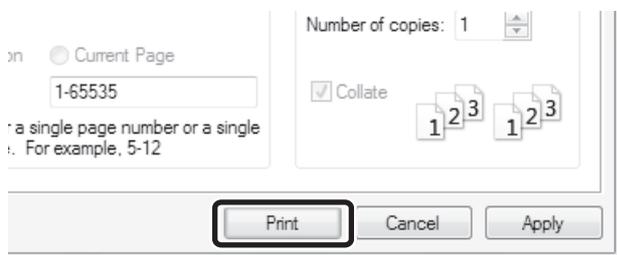
Start printing.

* Up to 30 sets of user settings can be saved.
* The following items cannot be saved in user settings.
    - A watermark that you created
    - Paper insertion settings
    - Overlay file
    - The login name, password, user name, and job name entered in the [Job Handling] tab

USING SAVED SETTINGS

1
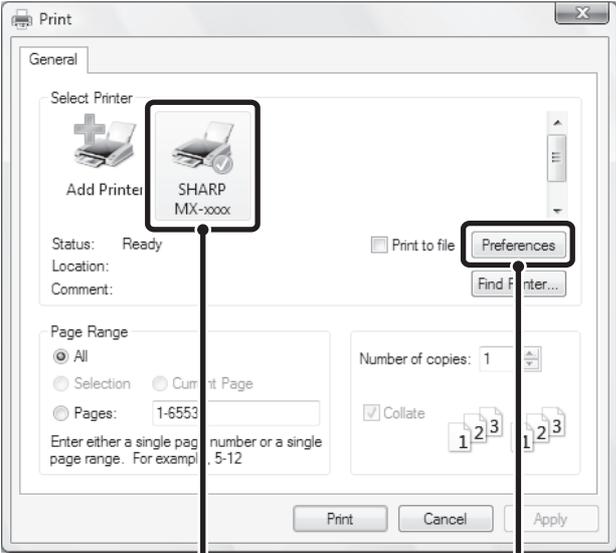
(1)   (2)

Open the printer driver properties window from the print window of the software application.

(1) **Select the printer driver of the machine.**

(2) **Click the [Preferences] button.**

The button that is used to open the printer driver properties window (usually [Properties] or [Printing Preferences]) may vary depending on the software application.

2

(1)   (2)
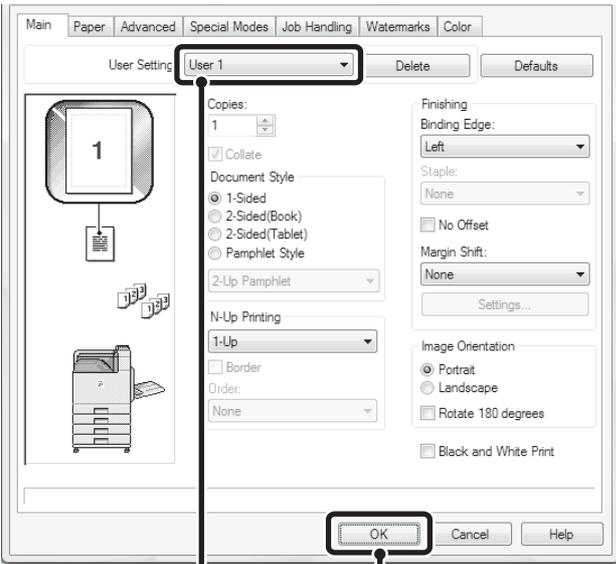
Select the print settings.

(1) **Select the user settings that you wish to use.**

(2) **Click the [OK] button.**

3

Start printing.

Deleting saved settings

Select the user settings that you want to delete in (1) of step 2 above, and click the [Delete] button.

CHANGING THE PRINTER DRIVER DEFAULT SETTINGS

The default settings of the printer driver can be changed using the procedure below. The settings selected using this procedure are saved and become the default settings when printing from a software application. (Settings selected in the printer driver properties window when printing from an application remain in effect only while the application is in use.)

1 **Click the [Start] button ( ) and select [Control Panel] and then [Printer].**

- In Windows 7, click the [start] button and then click [Devices and Printers].
- In Windows XP/Server 2003, click the [start] button and then click [Printers and Faxes].
- In Windows 98/Me/NT 4.0/2000, click the [Start] button, point to [Settings], and then select [Printers].

🖉 In Windows XP, if [Printers and Faxes] does not appear in the [start] menu, select [Control Panel], select [Printers and Other Hardware], and then select [Printers and Faxes].
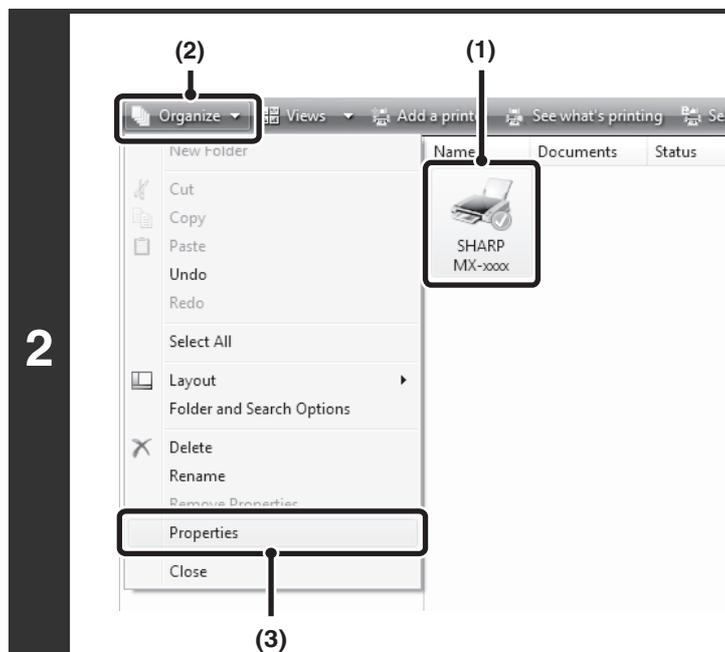
2 **Open the printer properties window.**

(1) Click the icon of the printer driver of the machine.

In Windows 7, right-click the icon of the printer driver of the machine. Go to step (3).

(2) Click the [Organize] menu.

In Windows 98/Me/NT 4.0/2000/XP/Server 2003, click the [File] menu.

(3) Select [Properties].

- In Windows 7, click the [Printer properties] menu.
- In Windows NT 4.0, select [Document Defaults] from the [File] menu to open the printer driver properties window. Go to step 4.
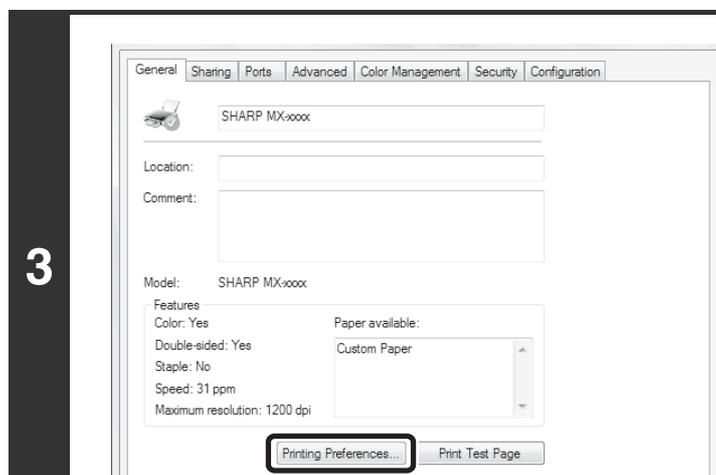
3 **Click the [Printing Preferences] button on the [General] tab.**

- In Windows 7, click the [Preferences] button on the [General] tab.
- In Windows 98/Me, click the [Setup] tab.

4
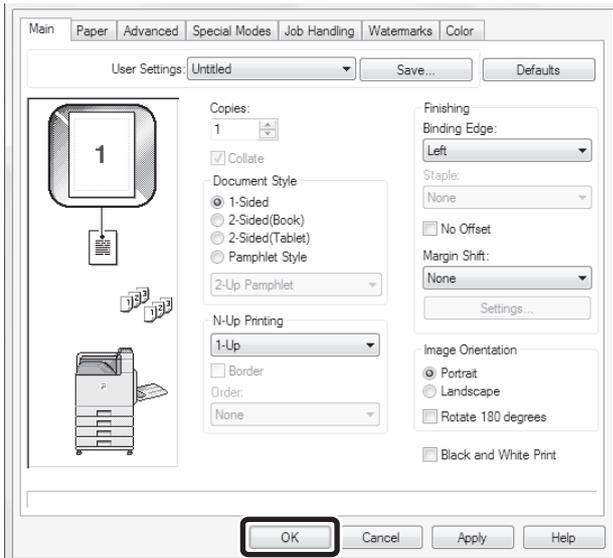
Configure the settings and click the [OK] button.

For explanations of the settings, see printer driver Help.

PRINTING FROM A MACINTOSH

BASIC PRINTING PROCEDURE

The following example explains how to print a document from the standard accessory program "TextEdit" in Mac OS X ("SimpleText" in Mac OS 9).

SELECTING PAPER SETTINGS

Select paper settings in the printer driver before selecting the print command.

1	**Select [Page Setup] from the [File] menu of TextEdit.** In Mac OS 9, select [Page Setup] from the [File] menu of SimpleText.
2	**Select paper settings.** **(1) Make sure that the correct printer is selected.** **(2) Select paper settings.** The paper size, paper orientation, and enlarge/reduce can be selected. **(3) Click the [OK] button.**
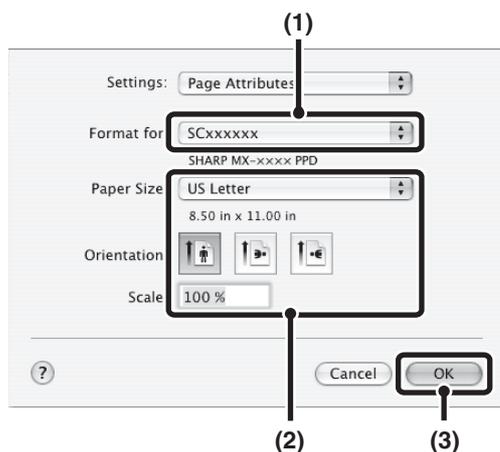
✎ The machine name that appears in the "Format for" menu is normally [SCxxxxxx]. In Mac OS X v10.6, it is normally [RDVxxxxxx]. ("xxxxxx" is a sequence of characters that varies depending on your machine model.)

PRINTING
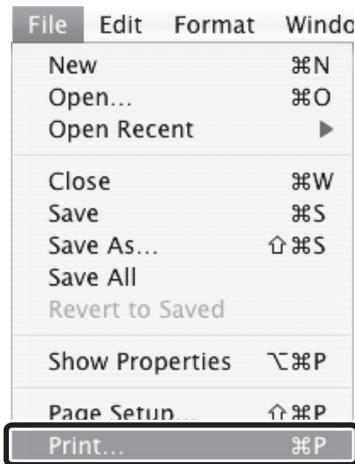
1	**Select [Print] from the [File] menu of TextEdit.** In Mac OS 9, select [Print] from the [File] menu of SimpleText.

> The menu used to execute printing may vary depending on the software application.
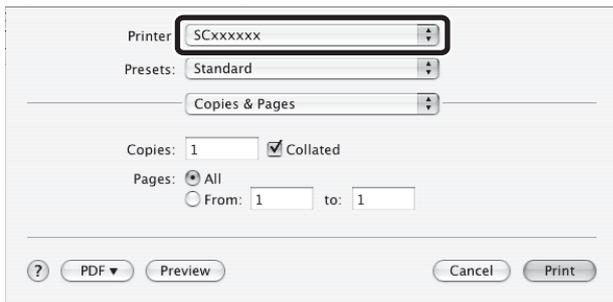
2	**Make sure that the correct printer is selected.**

> The machine name that appears in the "Printer" menu is normally [SCxxxxxx]. In Mac OS X v10.6, it is normally [RDVxxxxxx]. ("xxxxxx" is a sequence of characters that varies depending on the machine model.)
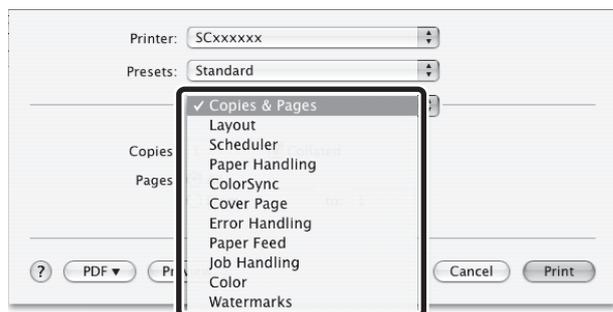
3	**Select print settings.** • In Mac OS X, click $\boxed{\updownarrow}$ next to [Copies & Pages] and select the settings that you wish to configure from the pull-down menu. The corresponding setting screen will appear. If the settings do not appear in Mac OS X v10.5 to 10.5.8 and 10.6, click "$\boxed{\downarrow}$" next to the printer name. • In Mac OS 9, click $\boxed{\updownarrow}$ next to [General] and select the settings that you wish to configure from the pull-down menu. The corresponding setting screen will appear.

4
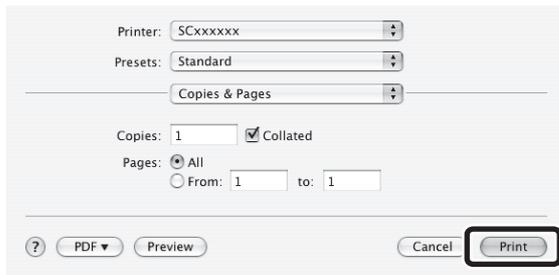
Click the [Print] button.

Printing begins.

✎ **When removing printed output...**
Remove the output horizontally so that it does not get caught on the actuator for output tray full detection.
If the actuator comes off, see "The actuator came off (when a finisher is not installed)" (page 4-22) in "4. TROUBLESHOOTING".

SELECTING THE PAPER

This section explains the [Paper Feed] settings ("Paper Source" setting in [General] in Mac OS 9) in the print settings window.

- **When [Auto Select] is selected**
  A tray with plain paper or recycled paper (the factory default setting is plain paper only) of the size specified in "Paper Size" in the page settings window is automatically selected.
- **When a paper tray is selected**
  The specified tray is used for printing regardless of the "Paper Size" setting in the page settings window.
  For the bypass tray, a paper type can also be specified. Make sure that the paper type setting for the bypass tray is correct and that the set type of paper is actually loaded in the bypass tray, and then select the appropriate bypass tray (paper type).

> - Special media such as envelopes can also be placed in the bypass tray. For the procedure for loading paper and other media in the bypass tray, see "LOADING PAPER IN THE BYPASS TRAY" (page 1-42) in "1. BEFORE USING THE MACHINE".
> - When "Enable Detected Paper Size in Bypass Tray" (Web page only : disabled by factory default) or "Enable Selected Paper Type in Bypass Tray" (Web page only : enabled by factory default) is enabled in the system settings (administrator), printing will not take place if the paper size or paper type specified in the printer driver is different from the paper size or paper type specified in the settings of the bypass tray.

- **When a paper type is selected**
  A tray with the specified type of paper and the size specified in "Paper Size" in the page settings window is used for printing.

> **System Settings (Administrator): Exclude Bypass-Tray from Auto Paper Select (Web page only)**
> When [Auto Select] is used for printing, this setting determines whether or not the paper in the bypass tray will be excluded from the paper that can be selected. This setting is disabled by factory default, and thus paper in the bypass tray is included in the paper that can be automatically selected. If special media are frequently loaded in the bypass tray, it is recommended that this setting be enabled.

PRINTING ON ENVELOPES

The bypass tray can be used to print on special media such as envelopes. The procedure for printing on an envelope from the printer driver properties screen is described below.
For the types of paper that can be used in the bypass tray, see "IMPORTANT POINTS ABOUT PAPER" (page 1-37) in "BEFORE USING THE MACHINE". For the procedure for loading paper in the bypass tray, see "LOADING PAPER IN THE BYPASS TRAY" (page 1-42) in "1. BEFORE USING THE MACHINE".
Select the envelope size in the appropriate settings of the application ("Page Settings" in many applications) and then perform the following steps.

1	**Select the paper size.** **(1) Select the envelope size from the "Paper Size" menu on the page setup screen.** In Mac OS 9, select the envelope size from the "Paper" menu on the page setup screen. **(2) Click the [OK] button.**

(1)
(2)

📝 In the case of media that can only be loaded in a certain orientation such as an envelope, you can rotate the image 180 degrees if needed. For more information, see "ROTATING THE PRINT IMAGE 180 DEGREES (Rotate 180 degrees)" (page 2-37).
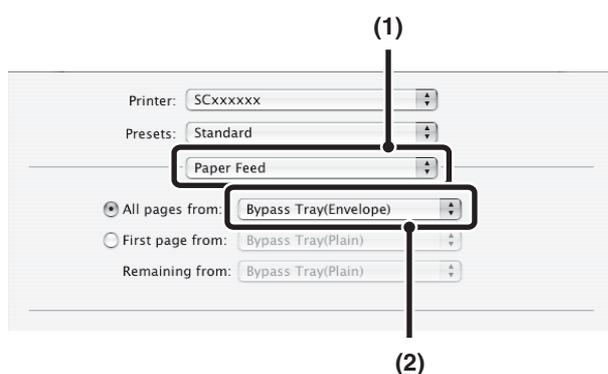
2	**Select the bypass tray.** **(1) Select [Paper Feed] on the print screen.** In Mac OS 9, select [General]. **(2) Select [Bypass Tray(Envelope)] from the "All pages from" menu.** • In Mac OS 9, select [Bypass Tray(Envelope)] from the "All pages from" menu of "Paper Source". • Set the paper type of the bypass tray to [Envelope] and make sure the envelope is loaded in the bypass tray.

(1)
(2)

📝 For more information on "Paper Feed", see "SELECTING THE PAPER" (page 2-19).

📝 It is recommended that you do a test print to check the print result before using an envelope.

PRINTING WHEN THE USER AUTHENTICATION FUNCTION IS ENABLED

When the user authentication function is enabled, you must enter your user information (login name, password, etc.) in order to print. The information that must be entered varies depending on the authentication method being used, so check with the administrator of the machine before printing.

1
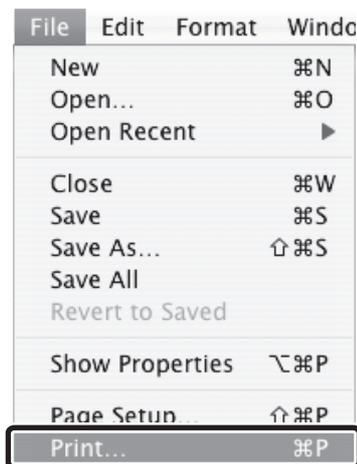
Select [Print] from the application's [File] menu.

The menu used to execute printing may vary depending on the software application.

2
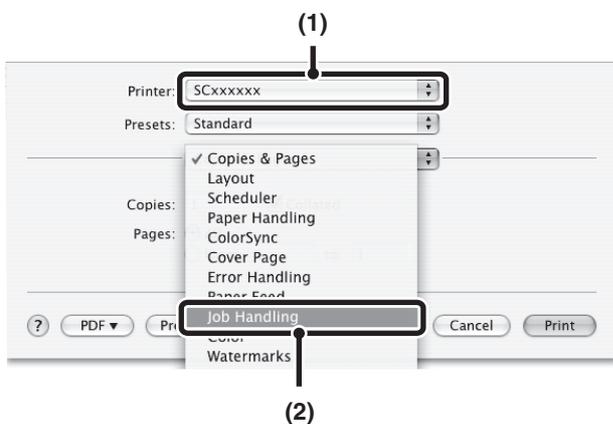
Display the job handling screen.

(1) Make sure that the machine's printer name is selected.

(2) Select [Job Handling].

- In Mac OS X v10.5 to 10.5.8 and 10.6, select [Job Handling] and then click the [Authentication] tab in the screen that appears.
- In Mac OS 9, select [User Authentication].

The machine name that appears in the "Printer" menu is normally [SCxxxxxx]. In Mac OS X v10.6, it is normally [RDVxxxxxx]. ("xxxxxx" is a sequence of characters that varies depending on the machine model.)

3

(1)   (2)   (3)

Start printing.

(1) Enter your user information.

- **When authentication is by login name/password**
  Enter your login name in "Login Name" and your password in "Password" (1 to 32 characters).
- **When authentication is by user number**
  Enter your user number (5 to 8 digits) in "User Number".

(2) Enter the user name and job name as necessary.

- **User Name**
  Enter your user name (maximum of 32 characters). Your entered user name will appear at the top of the operation panel. If you do not enter a user name, your computer login name will appear.
- **Job Name**
  Enter a job name (maximum of 30 characters). The entered job name will appear at the top of the operation panel as a file name. If you do not enter a job name, the file name set in the software application will appear.

(3) Click the [Print] button.

✎ In Mac OS X, you can click the ⬚ (lock) button after entering your login name and password, or user number, to simplify operation the next time you wish to print based on the same user authentication.

✎ • When user authentication is enabled, printing is possible without entering user information if black and white printing is set in the printer driver. For black and white print settings, see "BLACK AND WHITE PRINTING" (page 2-24). The number of pages printed is added to the "Other User" count. In this case, other print functions may be restricted. For more information, ask your administrator.

- Disabling of Printing by Invalid User
  This is used to prohibit printing of print jobs by users whose user information is not stored in the machine. When this function is enabled, printing is not allowed when user information is not entered or incorrect information is entered.
  This setting can be configured in [User Control] - [Default Settings] - [Disabling of Printing by Invalid User] in the Web page menu. (Administrator rights are required.)

FREQUENTLY USED FUNCTIONS

This section explains frequently used functions.

- SELECTING THE COLOR MODE
- TWO-SIDED PRINTING (page 2-26)
- FITTING THE PRINT IMAGE TO THE PAPER (page 2-28)

- PRINTING MULTIPLE PAGES ON ONE PAGE (page 2-29)
- STAPLING OUTPUT (page 2-31)

The explanations assume that the paper size and other basic settings have already been selected. For the basic procedure for printing and the steps for opening the printer driver properties window, see the following section:
☞ Windows: BASIC PRINTING PROCEDURE (page 2-4)
☞ Macintosh: BASIC PRINTING PROCEDURE (page 2-16)

✎ In Windows, view printer driver Help for details on printer driver settings for each printing function.

SELECTING THE COLOR MODE

This section explains how to select the color mode in the printer driver properties window. The following three selections are available for the color mode:

Automatic: The machine automatically determines whether each page is color or black and white and prints the page accordingly. Pages with colors other than black and white are printed using Y (Yellow), M (Magenta), C (Cyan) and Bk (Black) toner. Pages that are only black and white are printed using Bk (Black) toner only. This is convenient when printing a document that has both color and black and white pages, however, the printing speed is slower.

Color: All pages are printed in color. Both color data and black and white data are printed using Y (Yellow), M (Magenta), C (Cyan) and Bk (Black) toner.

Black and White: All pages are printed in black and white. Color data such as images or materials for a presentation are printed using black toner only. This mode helps conserve color toner when you do not need to print in color, such as when proofreading or checking the layout of a document.

✎ **When "Color Mode" is set to [Automatic]**
Even if the print result is black and white, the following types of print jobs will be counted as 4-color (Y (Yellow), M (Magenta), C (Cyan), and Bk (Black)) print jobs. To be always counted as a black and white job, select [Black and White].
- When the data is created as color data.
- When the application treats the data as color data even though the data is black and white.
- When an image is hidden under a black and white image.

Windows

(1) (2)
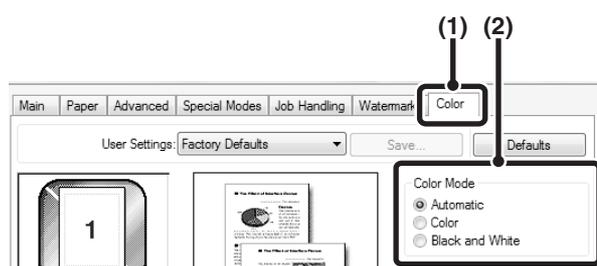
(1) **Click the [Color] tab.**

(2) **Select the "Color Mode" that you wish to use.**

BLACK AND WHITE PRINTING

[Black and White] can be selected on the [Main] tab as well as on the [Color] tab. Click the [Black and White Print] checkbox on the [Main] tab so that a checkmark ☑ appears.
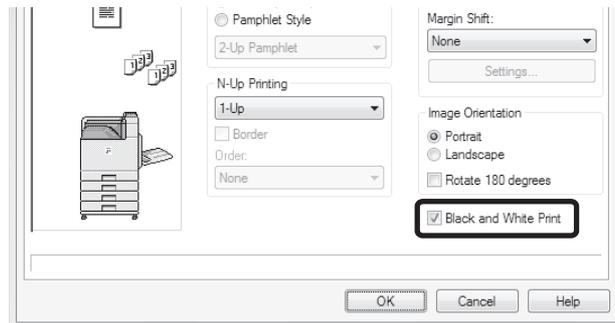
The [Black and White Print] checkbox on the [Main] tab and the "Color Mode" setting on the [Color] tab are linked. When the [Black and White Print] checkbox is selected ☑ on the [Main] tab, [Black and White] is also selected on the [Color] tab.

Macintosh
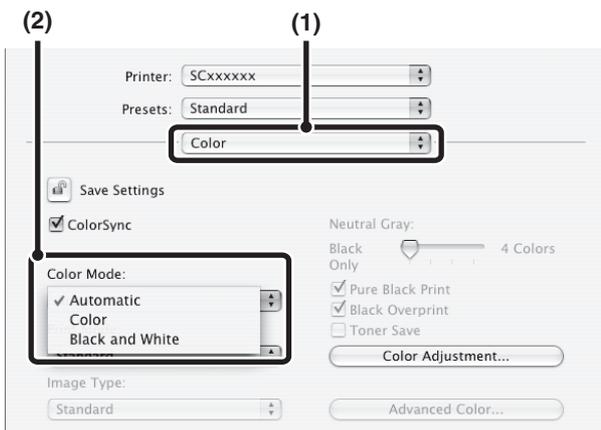
(1) Select [Color].

(2) Select the "Color Mode" that you wish to use.

2-24

SELECTING A PRINT MODE SETTING

This section explains the procedure for selecting a print mode setting. The "Print Mode Settings" consist of the following three items:

Normal: This mode is suitable for printing data such as regular text or a table.

High Quality: The print quality of color photos and text is high.

Fine: Select this when you want to a print color photo with greater clarity or print graphics with gradations, etc. (This mode cannot be selected when using the PCL5c printer driver.)

Windows
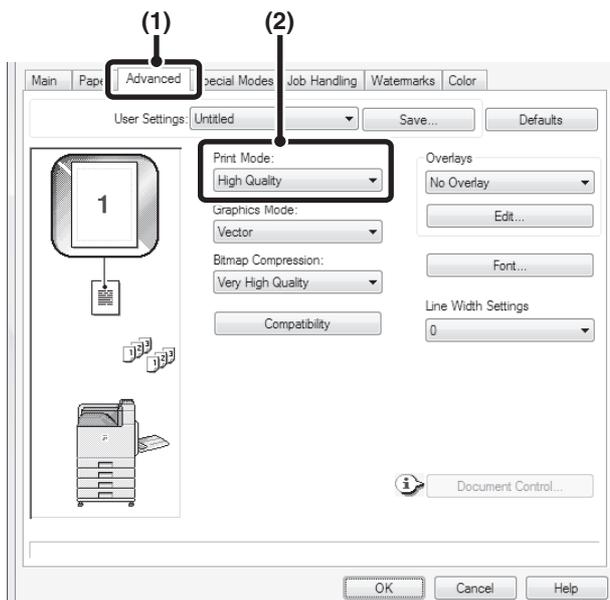
(1) Click the [Advanced] tab.

(2) Select the "Print Mode".

Macintosh
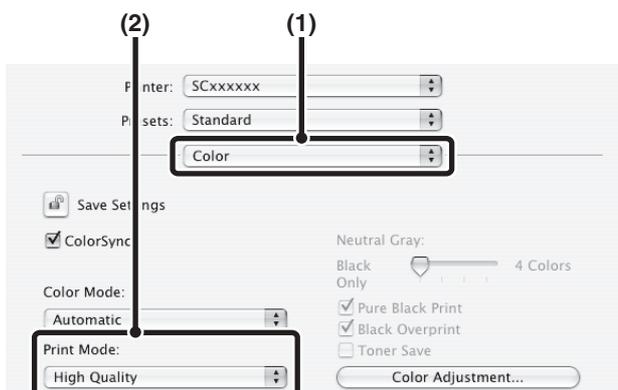
(1) Select [Color].

(2) Select the "Print Mode".

2-25

TWO-SIDED PRINTING

The machine can print on both sides of the paper. This function is useful for many purposes, and is particularly convenient when you want to create a simple pamphlet. Two-sided printing also helps conserve paper.

Orientation	Print results			
	Windows	Macintosh	Windows	Macintosh
Vertical	2-Sided(Book)	Long-edged binding (Flip on long edge)	2-Sided(Tablet)	Short-edged binding (Flip on short edge)
Horizontal	Windows	Macintosh	Windows	Macintosh
	2-Sided(Book)	Short-edged binding (Flip on short edge)	2-Sided(Tablet)	Long-edged binding (Flip on long edge)
	The pages are printed so that they can be bound at the side.		The pages are printed so that they can be bound at the top.	
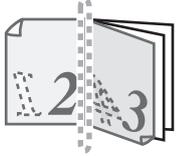
Windows
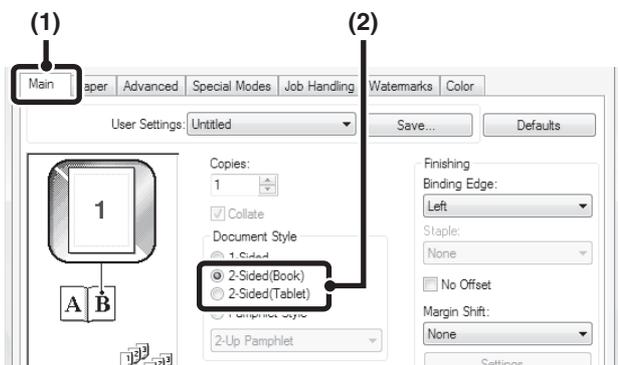
(1) Configure the settings on the [Main] tab.

(2) Select [2-Sided(Book)] or [2-Sided(Tablet)].

Macintosh
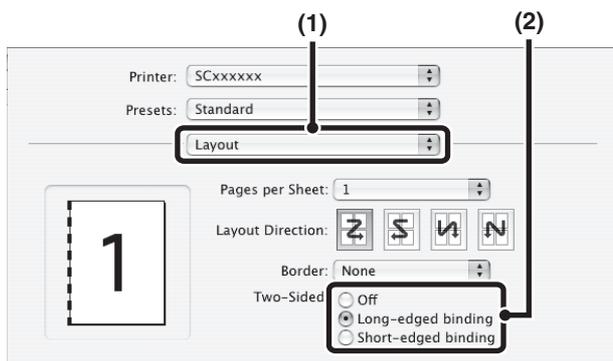
(1) **Select [Layout].**

(2) **Select [Long-edged binding] or [Short-edged binding].**

- In Mac OS X v10.2.8, select the settings in [Advanced].
- In Mac OS 9, select [Output/Document Style] and then select [Flip on long edge] or [Flip on short edge].

FITTING THE PRINT IMAGE TO THE PAPER

This function is used to automatically enlarge or reduce the printed image to match the size of the paper loaded in the machine.
This is convenient for such purposes as enlarging an invoice or A5 size document to letter or A4 size to make it easier to view, and to print when the same size of paper as the document image is not loaded in the machine.

Invoice or A5   Letter or A4
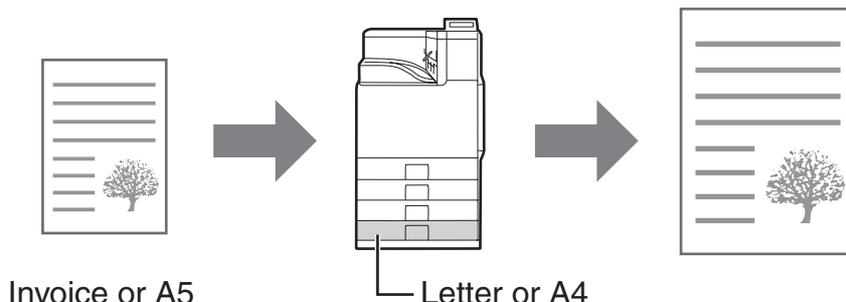
The following example explains how to print an invoice size document on letter size paper.

Windows
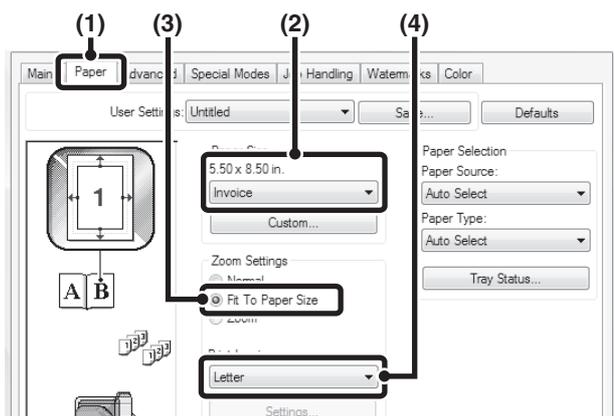
(1) **Click the [Paper] tab.**

(2) **Select the size of the print image (for example: Invoice).**

(3) **Select [Fit To Paper Size].**

(4) **Select the actual paper size to be used for printing (for example: Letter).**

Macintosh

(This function can only be used in Mac OS X v10.4.11, v10.5 to 10.5.8 and 10.6)
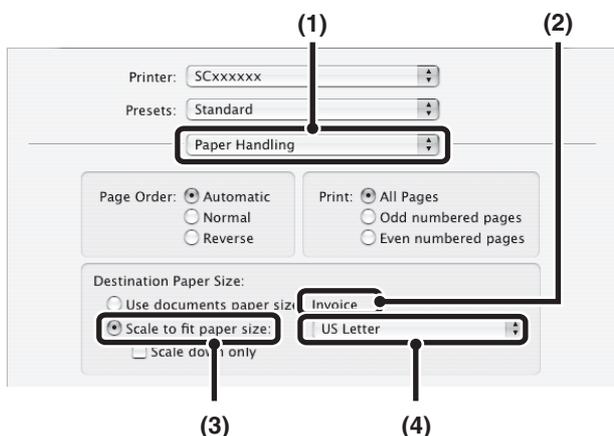
(1) **Select [Paper Handling].**

(2) **Check the size of the print image (for example: Invoice).**

To change the print image size, use the "Paper Size" menu that appears when [Page Setup] is selected.

(3) **Select [Scale to fit paper size].**

(4) **Select the actual paper size to be used for printing (for example: Letter).**

PRINTING MULTIPLE PAGES ON ONE PAGE

This function can be used to reduce the print image and print multiple pages on a single sheet of paper.
This is convenient when you want to print multiple images such as photos on a single sheet of paper, and when you want to conserve paper. This function can also be used in combination with two-sided printing for maximum conservation of paper.
For example, when [2-Up] (2 pages per sheet) and [4-Up] (4 pages per sheet) are selected, the following print results will be obtained, depending on the order selected.

N-Up (Pages per sheet)	Print results		
	Left To Right	Right To Left	Top To Bottom (When the print orientation is landscape)
2-Up (2 pages per sheet)	*1 2* *3 4*	*2 1* *4 3*	*1 2* *3 4*
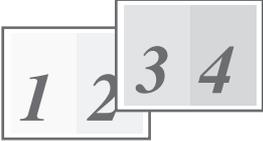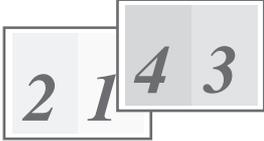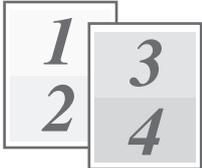
N-Up (Pages per sheet)	Right, and Down	Down, and Right	Left, and Down	Down, and Left
4-Up (4 pages per sheet)	*1 2* *3 4*	*1 3* *2 4*	*2 1* *4 3*	*3 1* *4 2*

✎
- The page orders for 6-Up, 8-Up, 9-Up, and 16-Up are the same as for 4-Up.
- In a Windows environment, the page order can be viewed in the print image in the printer driver properties window. In a Macintosh environment, the page orders are displayed as selections.
- In a Macintosh environment, the number of pages that can be printed on a single sheet is 2, 4, 6, 9, or 16.

Windows

(1)

(2) (3)   (4)
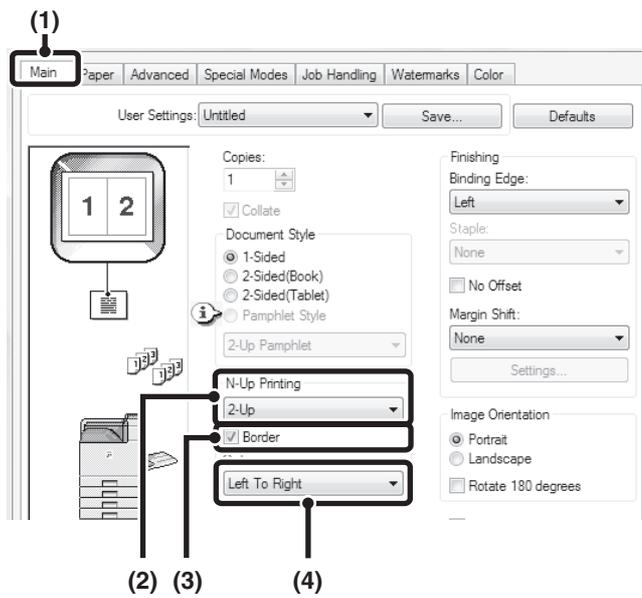
(1) **Configure the settings on the [Main] tab.**

(2) **Select the number of pages per sheet.**

(3) **If you wish to print borderlines, click the [Border] checkbox so that a checkmark ☑ appears.**

(4) **Select the order of the pages.**

Macintosh

(1)   (2)

(4)   (3)
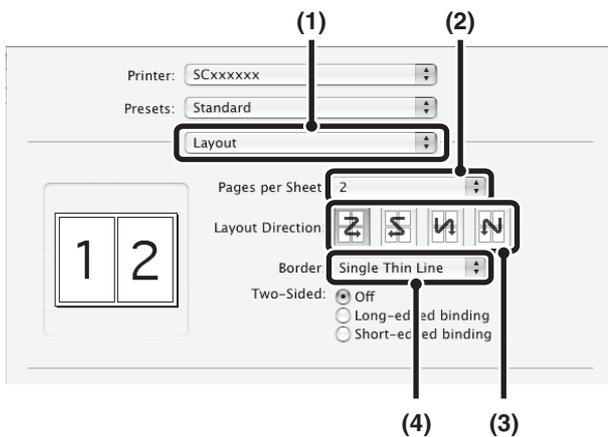
(1) **Select [Layout].**

(2) **Select the number of pages per sheet.**

(3) **Select the order of the pages.**

(4) **If you wish to print borderlines, select the desired type of borderline.**

STAPLING OUTPUT

The staple function can be used to staple output.
This function saves considerable time when preparing handouts for a meeting or other stapled materials. The staple function can also be used in combination with two-sided printing to create materials with a more sophisticated appearance.
Stapling positions can be selected to obtain the following stapling results.
* Stapling takes place in one location only.

Orientation	Left	Right	Top
Vertical	*ABCD*		*ABCD*
Horizontal		*ABCD*	

✎ • To use the staple function, a finisher is required.
  • For the maximum number of sheets that can be stapled, see "SPECIFICATIONS" in the Safety Guide.
    The maximum number of sheets that can be stapled at once includes any covers and/or inserts that are inserted.
  • The staple function cannot be used in combination with the offset function, which offsets the position of each output job from the previous job.
  • When the staple function is disabled in "Device Control" (Web page only) in the machine's system settings (administrator), stapling is not possible.

Windows
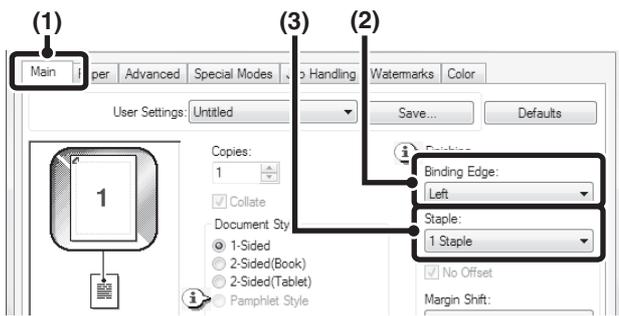
(1)   (3)   (2)

(1) Configure the settings on the [Main] tab.

(2) Select the "Binding Edge".

(3) Select the staple function.

For the staple function, select the number of staples in the "Staple" menu.

Macintosh
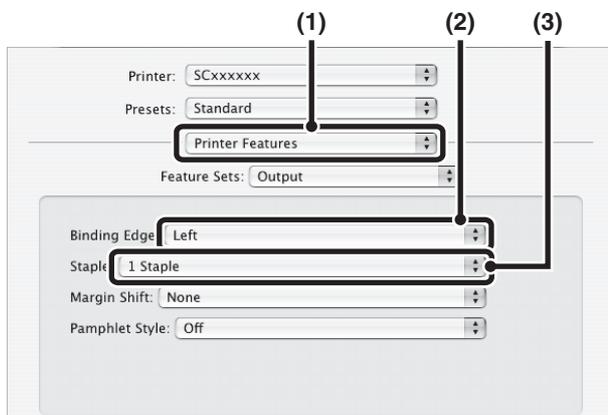
(1)   (2)   (3)

(1) Select [Printer Features].

(2) Select the "Binding Edge".

(3) Select the staple function.

For the staple function, select the number of staples in the "Staple" menu.

- • In Mac OS X v10.2.8, select the settings in [Advanced].
- • In Mac OS 9, select the settings in [Output/Document Style].

CONVENIENT PRINTING FUNCTIONS

This section explains convenient functions for specific printing objectives.

- CONVENIENT FUNCTIONS FOR CREATING PAMPHLETS AND POSTERS
- FUNCTIONS TO ADJUST THE SIZE AND ORIENTATION OF THE IMAGE (page 2-37)
- COLOR MODE ADJUSTMENT FUNCTION (page 2-41)

- FUNCTIONS THAT COMBINE TEXT AND IMAGES (page 2-45)
- PRINT FUNCTIONS FOR SPECIAL PURPOSES (page 2-48)

The explanations assume that the paper size and other basic settings have already been selected. For the basic procedure for printing and the steps for opening the printer driver properties window, see the following section:
☞ Windows: BASIC PRINTING PROCEDURE (page 2-4)
☞ Macintosh: BASIC PRINTING PROCEDURE (page 2-16)

> ✎ In Windows, view printer driver Help for details on printer driver settings for each printing function.

CONVENIENT FUNCTIONS FOR CREATING PAMPHLETS AND POSTERS

CREATING A PAMPHLET (Pamphlet)

The pamphlet function prints on the front and back of each sheet of paper so that the sheets can be folded and bound to create a pamphlet. This is convenient when you wish to compile printed output into a pamphlet.
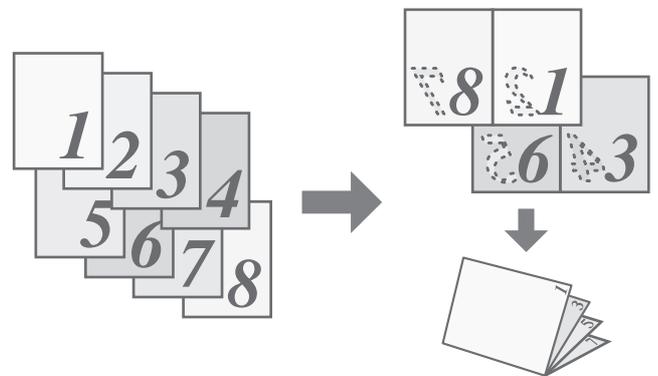
Windows
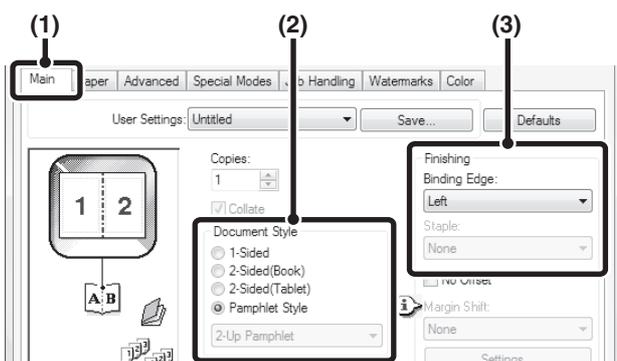
(1) Configure the settings on the [Main] tab.

(2) Select [Pamphlet Style].

(3) Select the "Binding Edge".

Macintosh
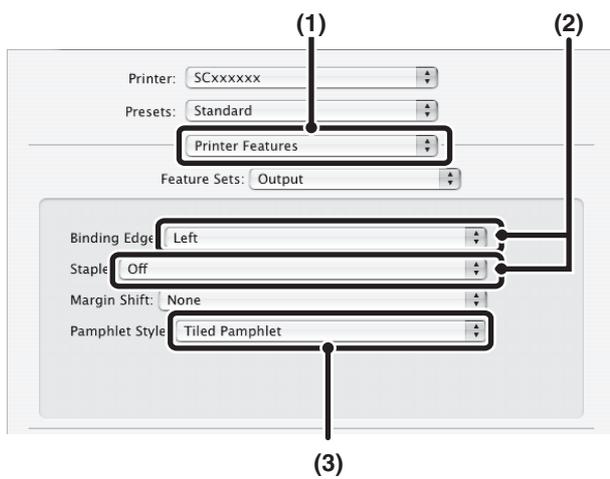
(1) **Select [Printer Features].**

(2) **Select the "Binding Edge".**

(3) **Select [Tiled Pamphlet] or [2-Up Pamphlet].**

- -

- In Mac OS X v10.2.8, select from the "2-Side Printing" and "Binding Edge" menus in [Advanced].
- In Mac OS 9, select the settings in [Output/Document Style].

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INCREASING THE MARGIN (Margin Shift)

This function is used to shift the print image to increase the margin at the left, right, or top of the paper. This is convenient when you wish to staple or punch the output but the binding area overlaps the text. When a finisher is installed, the staple function can be used with this function.
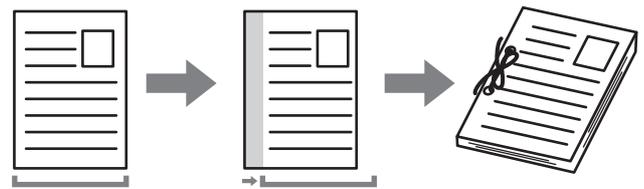
Windows
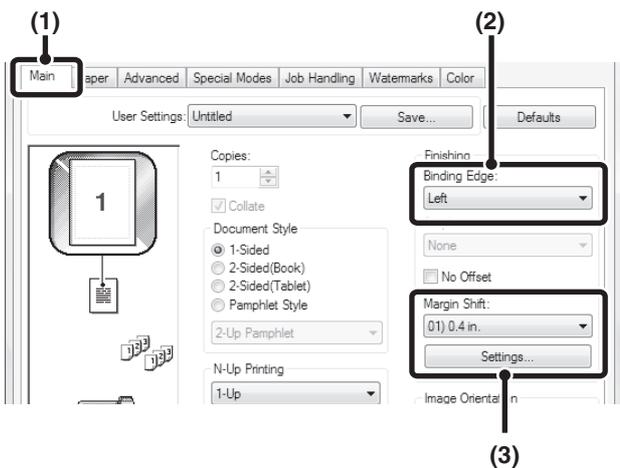
(1) Configure the settings on the [Main] tab.

(2) Select the "Binding Edge".

(3) Select the "Margin Shift".

Select from the "Margin Shift" menu. If you wish to configure another numeric setting, select the setting from the pull-down menu and click the [Settings] button. Click the button or directly enter the number.

Macintosh
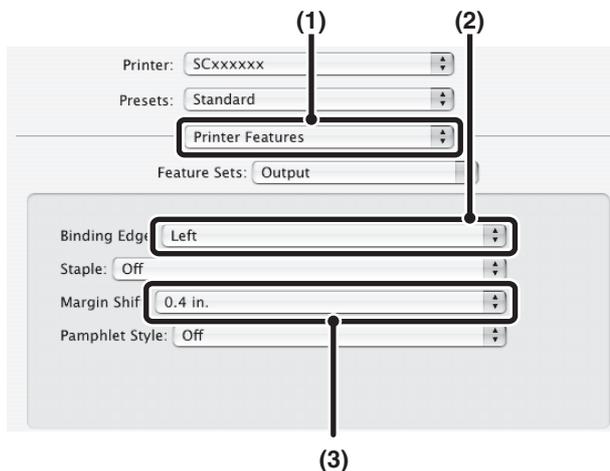
(1) Select [Printer Features].

(2) Select the "Binding Edge".

(3) Select the "Margin Shift".

- -

- In Mac OS X v10.2.8, select from the "Binding Edge" and "Margin Shift" menus in [Advanced].
- In Mac OS 9, select [Advanced] and then select the binding edge and margin shift from the margin shift menu.

CREATING A LARGE POSTER (Poster Printing)

(This function is only available in Windows.)

One page of print data can be enlarged and printed using multiple sheets of paper (4 sheets (2 x 2), 9 sheets (3 x 3) or 16 sheets (4 x 4)). The sheets can then be attached together to create a large poster. To enable precise alignment of the edges of the sheets during attachment, borderlines can be printed and overlapping edges can be created (overlap function).
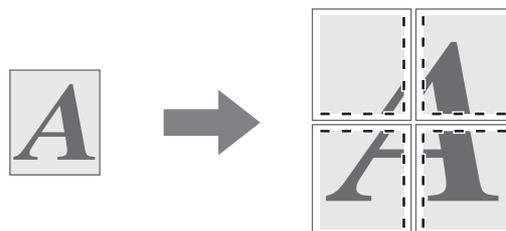
Windows

(This function can be used when the PCL6 or PS printer driver is used.)
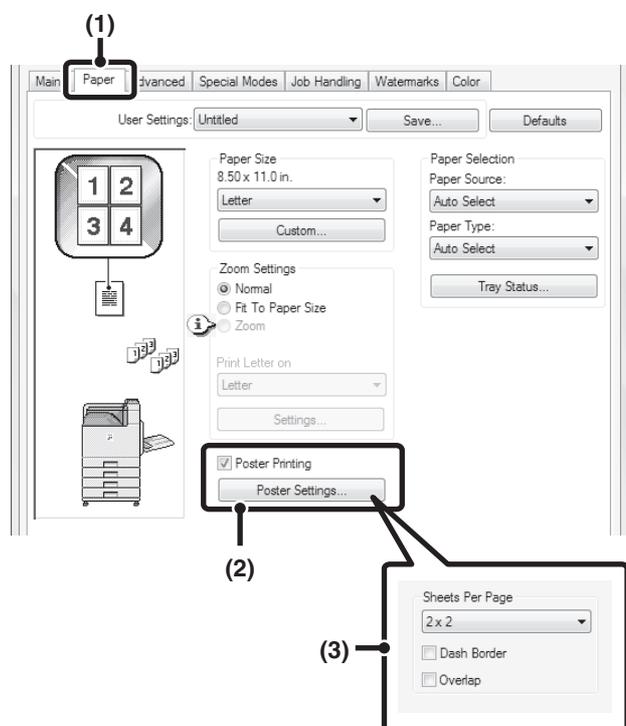
(1) Click the [Paper] tab.

(2) Select the [Poster Printing] checkbox ☑ and click the [Poster Settings] button.

(3) Select poster settings.

Select the number of sheets of paper to be used from the pull-down menu. If you wish to print borderlines and/or use the overlap function, select the corresponding checkboxes ☑.

FUNCTIONS TO ADJUST THE SIZE AND ORIENTATION OF THE IMAGE

ROTATING THE PRINT IMAGE 180 DEGREES (Rotate 180 degrees)

This feature rotates the image 180 degrees so that it can be printed correctly on paper that can only be loaded in one orientation (such as envelopes or paper with punch holes). (In Mac OS X, a portrait image cannot be rotated 180 degrees.)

ABCD → ABCD
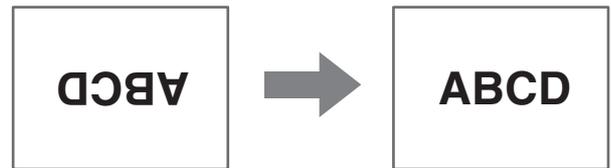
Windows
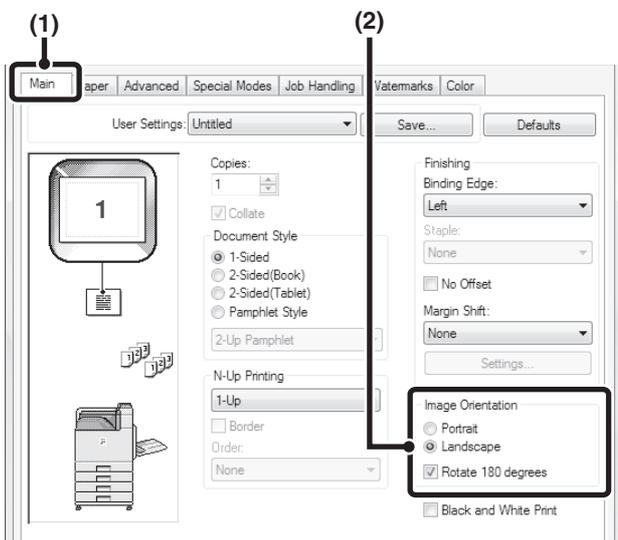
(1) Select the setting on the [Main] tab.

(2) Select the [Rotate 180 degrees] checkbox .

Macintosh
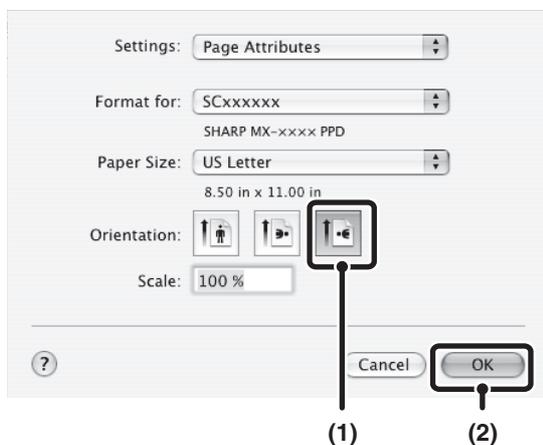
(1) Select [Page Setup] from the [File] menu and click the ⬛ button.

In Mac OS 9, select [Page Setup] from the [File] menu and select [PostScript Options]. Then select the [Flip Horizontal] and [Flip Vertical] checkbox ⬛ .

(2) Click the [OK] button.

ENLARGING/REDUCING THE PRINT IMAGE (Zoom/XY-Zoom)

This function is used to enlarge or reduce the image to a selected percentage. This allows you to enlarge a small image or add margins to the paper by slightly reducing an image.
When using the PS printer driver (Windows), you can set the width and length percentages separately to change the proportions of the image. (XY-Zoom)
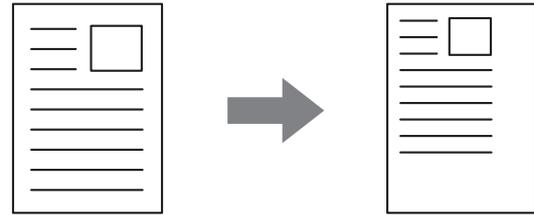
Windows
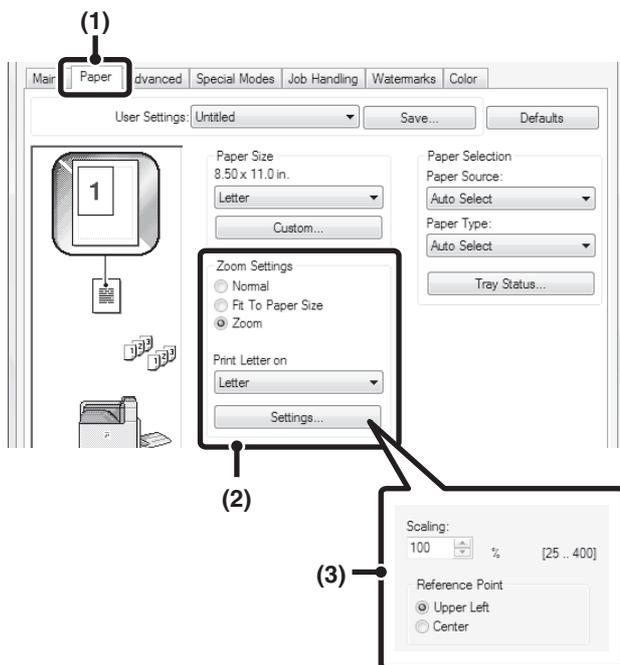
(1) **Click the [Paper] tab.**

(2) **Select [Zoom] and click the [Settings] button.**

The actual paper size to be used for printing can be selected from the pull-down menu.

(3) **Select the zoom ratio.**

Directly enter a number (%) or click the ▲ button to change the ratio in increments of 1%. You can also select [Upper Left] or [Center] for the base point on the paper.

Macintosh
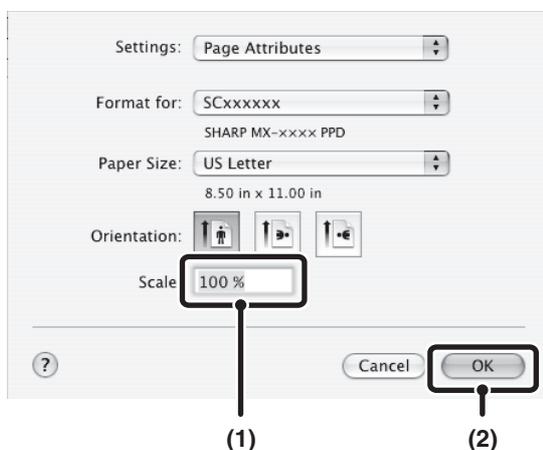
(1) **Select [Page Setup] from the [File] menu and enter the ratio (%).**

In Mac OS 9, select [Page Setup] from the [File] menu and enter the ratio (%).

(2) **Click the [OK] button.**

ADJUSTING LINE WIDTHS WHEN PRINTING (Line Width Settings)

(This function is only available in Windows.)

When lines in special applications such as CAD cannot be printed correctly, this setting can be used to adjust line widths, such as making overall line widths wider. (This setting is only effective for vector data; raster data such as bitmap images cannot be adjusted.) When the data includes lines of varying widths, you can also print all lines at the minimum width. (Only for black and white printing.)
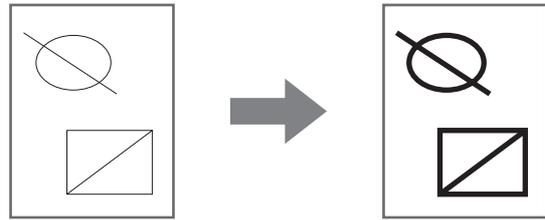
Windows

(This function can be used when the PCL6 printer driver is used.)
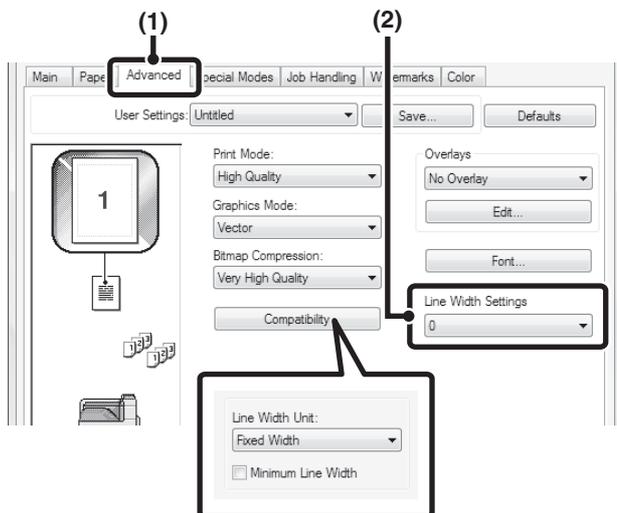
(1) Click the [Advanced] tab.

(2) Adjust the line width.

Select a number from the pull-down menu.

- The units of line-width adjustment can be set to "Fixed Width" or "Ratio". Click the [Compatibility] button and select the units from the "Line Width Unit" menu.
- To print all lines in the data at the minimum line width, click the [Compatibility] button and select the [Minimum Line Width] checkbox (☑).

REVERSING THE IMAGE (Mirror Image)

The image can be reversed to create a mirror image.
This function can be used to conveniently print a design
for a woodblock print or other printing medium.
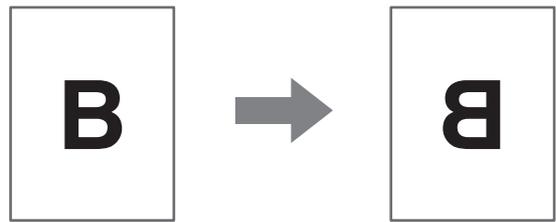
Windows

(This function can be used when the PS printer driver is used.)
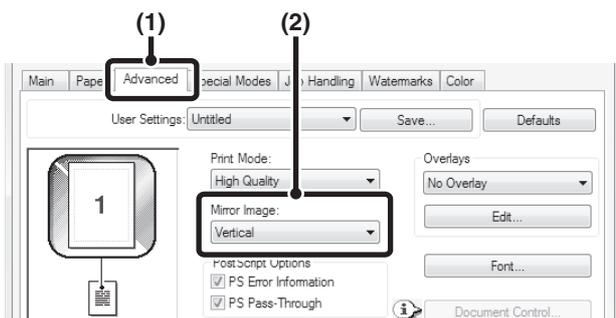
(1) Click the [Advanced] tab.

(2) Select a mirror image setting.

If you wish to reverse the image horizontally, select
[Horizontal]. If you wish to reverse the image vertically,
select [Vertical].

Macintosh

(This function can only be used in Mac OS 9.)
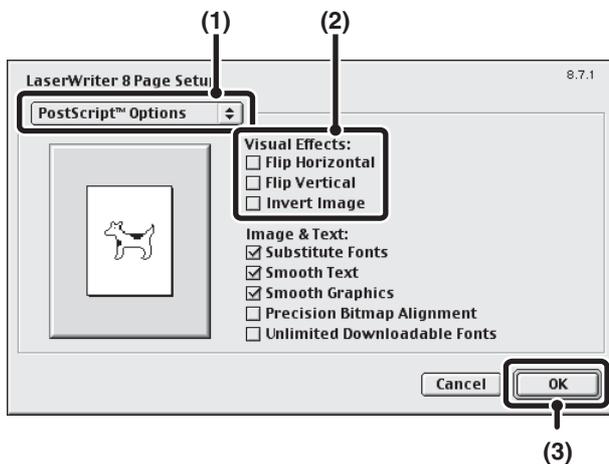
**(1) Select [Page Setup] from the [File] menu
and select [PostScript Options].**

(2) Select "Visual Effects".

To reverse the image horizontally, select [Flip Horizontal].
To reverse the image vertically, select [Flip Vertical].

(3) Click the [OK] button.

COLOR MODE ADJUSTMENT FUNCTION

ADJUSTING THE BRIGHTNESS AND CONTRAST OF THE IMAGE (Color Adjustment)

The brightness and contrast can be adjusted in the print settings when printing a photo or other image. These settings can be used for simple corrections when you do not have image editing software installed on your computer.

Windows
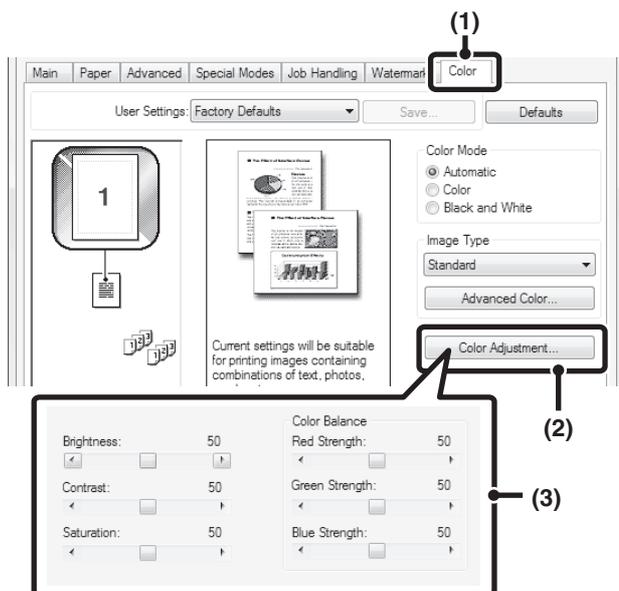
(1) **Click the [Color] tab.**

(2) **Click the [Color Adjustment] button.**

(3) **Adjust the color settings.**

To adjust a setting, drag the slide bar ☐ or click the ◄ or ► button.

Macintosh

(This function can only be used in Mac OS X v10.3.9 and v10.4.11.)
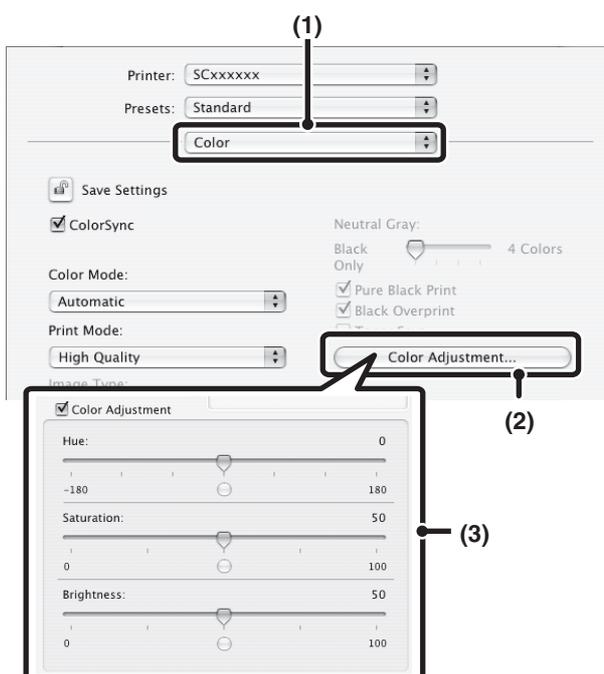
(1) **Select [Color].**

(2) **Click the [Color Adjustment] button.**

(3) **Select the [Color Adjustment] checkbox ☑ and adjust the color.**

Adjust the settings by dragging the slide bars ▽ .

2-41

PRINTING FAINT TEXT AND LINES IN BLACK (Text To Black/Vector To Black)

(This function is only available in Windows.)

When printing a color image in grayscale, color text and lines that are faint can be printed in black. (Raster data such as bitmap images cannot be adjusted.) This allows you to bring out color text and lines that are faint and difficult to see when printed in grayscale.

- [Text To Black] can be selected to print all text other than white text in black.
- [Vector To Black] can be selected to print all vector graphics other than white lines and areas in black.
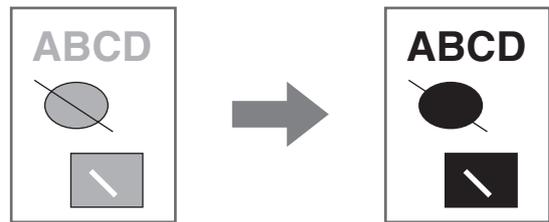
Windows
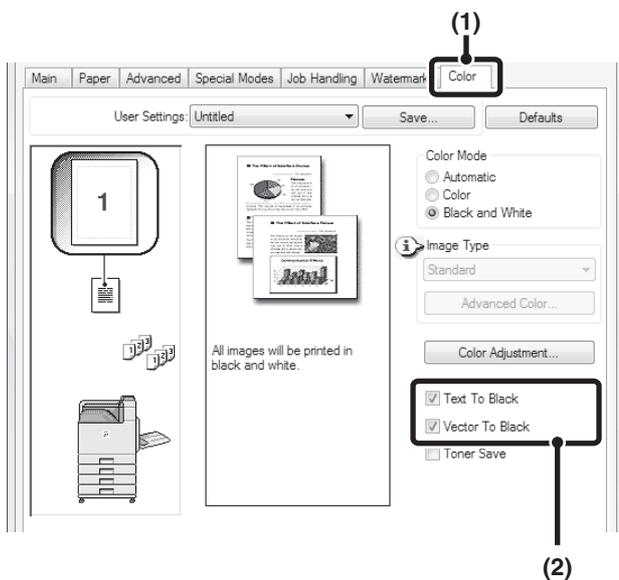
(1) **Click the [Color] tab.**

(2) **Select the [Text To Black] checkbox ☑ and/or the [Vector To Black] checkbox ☑.**

SELECTING COLOR SETTINGS TO MATCH THE IMAGE TYPE (Advanced Color)

Preset color settings are available in the machine's printer driver for various uses. These enable printing using the most suitable color settings for the color image type.

Advanced color settings can also be configured to match the objective of the color image, such as color management settings and the screening setting for adjustment of color tone expression.

Windows
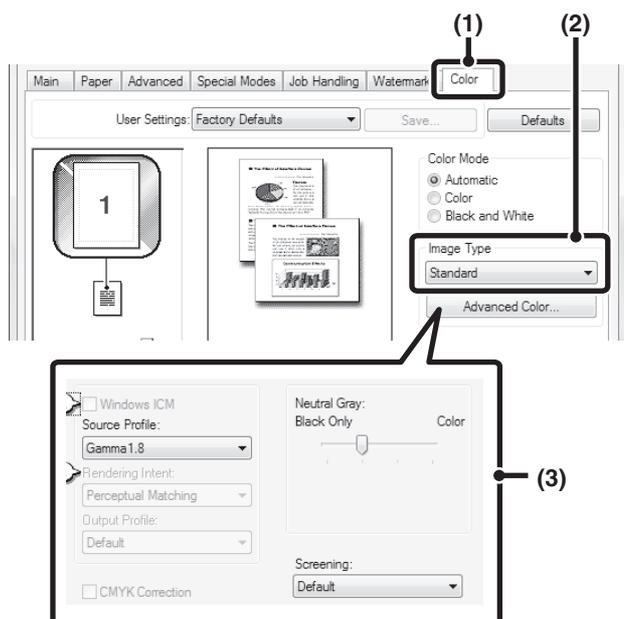
(1) Click the [Color] tab.

(2) Select the "Image Type".

A document type to match the data to be printed can be selected from the pull-down menu.

- Standard (for data that includes text, photos, graphs, etc.)
- Graphics (for data with many drawings or illustrations)
- Photo (for photo data or data that uses photos)
- CAD (for engineering drawing data)
- Scan (for data scanned by a scanner)
- Custom (for data to be printed with special settings)

(3) Select advanced color settings.

If you wish to select advanced settings, click the [Advanced Color] button.

If you wish to perform color management using Windows ICM* in your operating system, select [Custom] for the image type at step (2) and then select the [Windows ICM] checkbox ☑ . To configure advanced color management settings such as "Source Profile", select the desired settings from the menus.

*Cannot be selected when using the PS printer driver on Windows Vista/Server 2008.

Macintosh
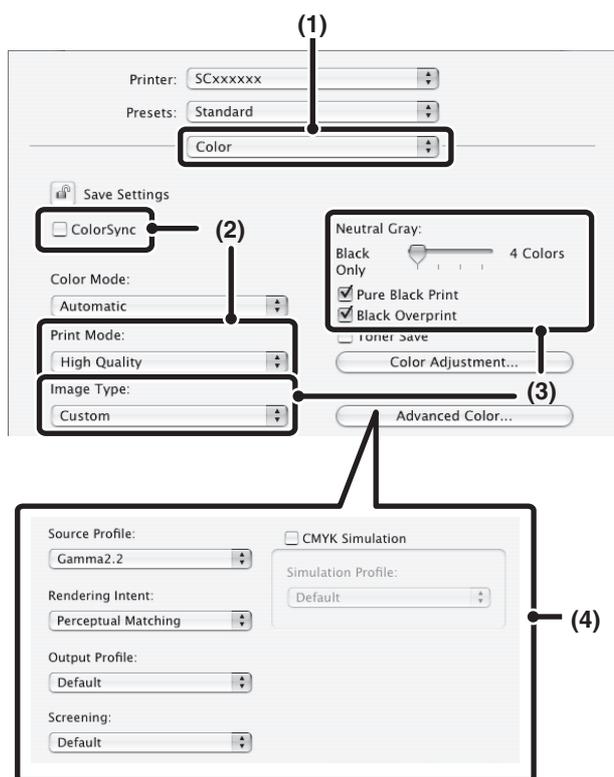
(1) **Select [Color].**

(2) **Select color print settings.**

To use the Mac OS Color Management function, select the [ColorSync] checkbox ☑ . When this is done, "Image Type" cannot be selected.

(3) **Select the color image type.**

An image type to match the data to be printed can be selected from the pull-down menu.
- Standard (for data that includes text, photos, graphs, etc.)
- Graphics (for data with many drawings or illustrations)
- Photo (for photo data or data that uses photos)
- CAD (for engineering drawing data)
- Scan (for data scanned by a scanner)
- Custom (for data to be printed with special settings)

[Neutral Gray] can be used when [Custom] is selected.

(4) **Select advanced color settings.**

If you wish to select detailed settings, click the [Advanced Color] button.
To configure color management settings, select the desired settings from the menus. To use "CMYK Simulation", select the [CMYK Simulation] checkbox ☑ and then select the desired setting.

- -

- In Mac OS X v10.5 to 10.5.8 and 10.6, click the [Advanced] tab to configure advanced color settings.
- In Mac OS X v10.2.8, select the color image type from the "Image Type" menu.
- In Mac OS 9, select [Color], [Color2], and [Color3] to configure color print settings.

The following color management settings are available.

- Windows ICM*1 checkbox: Color management method in a Windows environment
- ColorSync checkbox*2: Color management method in a Macintosh environment
- Source Profile: Select the color profile used to display the image on the computer screen.
- Rendering Intent: Standard value used when converting the color balance of the image displayed on the computer screen to a color balance that can be printed by the machine.
- Output Profile: Selecting a color profile for the image to be printed
- CMYK Correction*3: When printing a CMYK image, you can correct the image to obtain the optimum result.
- Screening: Select the most suitable image processing method for the image being printed.
- Neutral Gray: Select the toner color used to print gray areas.
- Pure Black Print*4: Black text and vector graphics can be printed using black toner only.
- Black Overprint*4: Prevents whitening of the outline of black text.
- CMYK Simulation*4: The color can be adjusted to simulate printing using the process colors used by printing presses.
- Simulation Profile*4: Selecting a process color

*1 Cannot be selected when using the PS printer driver on Windows Vista/Server 2008.
*2 Cannot be selected in Mac OS X v10.2.8.
   In Mac OS 9, can be selected in the "Color Matching" menu.
*3 Can only be used when using the PCL6 printer driver.
*4 Can only be used when using the PS printer driver (Windows/Macintosh).

FUNCTIONS THAT COMBINE TEXT AND IMAGES

ADDING A WATERMARK TO PRINTED PAGES (Watermark)

Faint shadow-like text can be added to the background of the printed image as a watermark. The size, color, density, angle, and print position of the watermark text can be adjusted. The text can be selected from a pre-stored list, or entered to create an original watermark.

Windows

(1) (2)
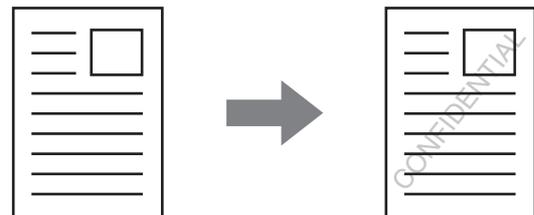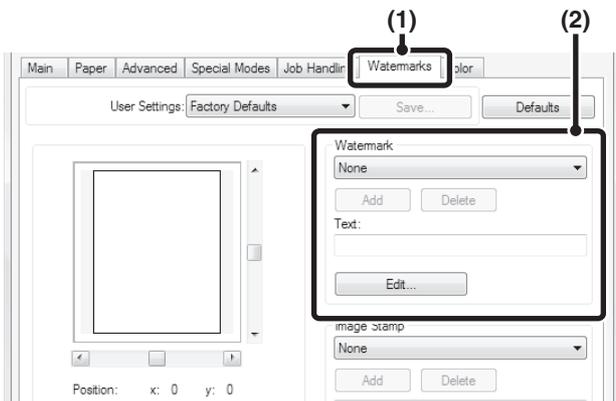
(1) **Click the [Watermarks] tab.**

(2) **Select the watermark settings.**

Select a stored water mark from the pull-down menu. You can click the [Edit] button to edit the font color and select other detailed settings.

> **If you wish to create a new watermark...**
> Enter the text of the watermark in the "Text" box and click the [Add] button.

Macintosh

(2) (1)
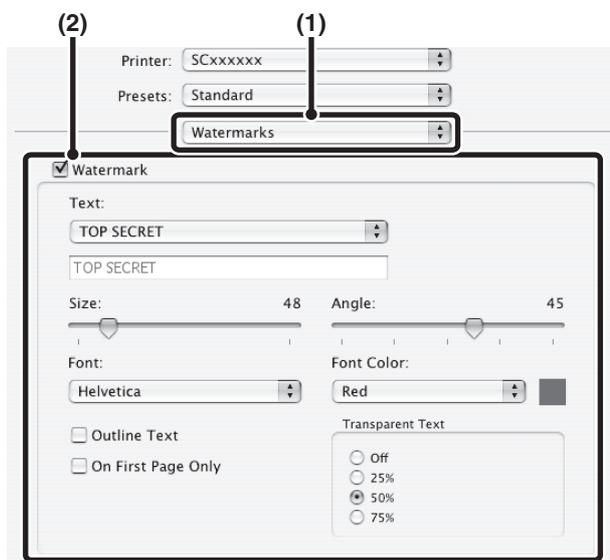
(1) **Select [Watermarks].**

(2) **Click the [Watermark] checkbox and configure watermark settings.**

Detailed watermark settings can be configured such as selection of the text and editing of the font and color. Adjust the size and angle of the text by dragging the slide bar .

> In Mac OS 9, select [Watermark] and configure the settings.

PRINTING AN IMAGE OVER THE PRINT DATA (Image Stamp)

(This function is only available in Windows.)

A bitmap or JPEG image stored on your computer can be printed over the print data. The size, position, and angle of the image can be adjusted. This feature can be used to "stamp" the print data with a frequently used image or an icon of your own creation.
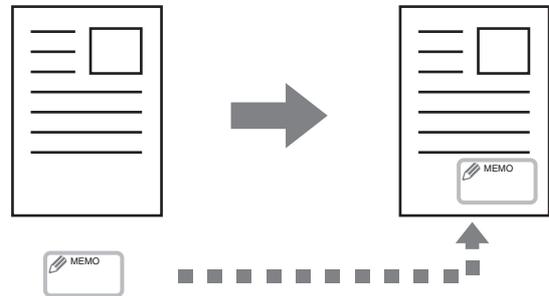
Windows

(This function can be used when the PCL6 or PS printer driver is used.)
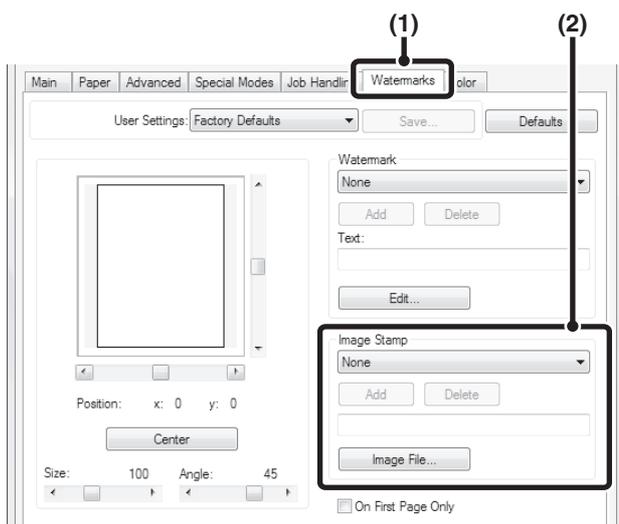
(1) Click the [Watermarks] tab.

(2) Select the image stamp setting.

If an image stamp has already been stored, it can be selected from the pull-down menu.
If you have not stored an image stamp, click the [Image File], select the file you wish to use for the image stamp, and click the [Add] button.

CREATING OVERLAYS FOR PRINT DATA (Overlays)

(This function is only available in Windows.)

The print data can be printed in a previously created overlay. By creating table rulings or a decorative frame in an application different from that of the text file and registering the data as an overlay file, an attractive print result can be easily obtained without the need for complex manipulations.
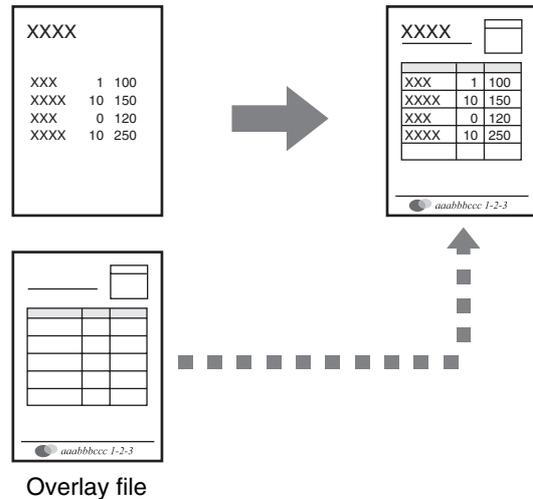
Overlay file

Windows

Create an overlay file.

(1) **(2)**

(3)
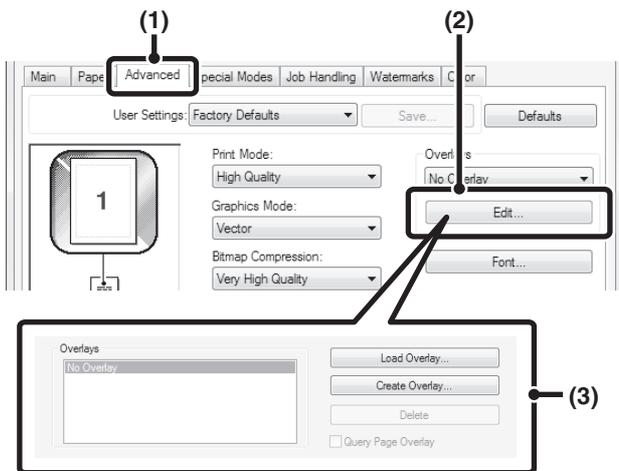
(1) Click the [Advanced] tab.

Configure the printer driver settings from the software application that you wish to use to create the overlay file.

(2) Click the [Edit] button.

(3) Create an overlay file.

Click the [Create Overlay] button and specify the name and folder to be used for the overlay file that you wish to create. The file will be created when the settings are completed and printing is started.

- -

• When printing is started, a confirmation message will appear. The overlay file will not be created until the [Yes] button is clicked.

• To register a previously existing overlay file, click the [Load Overlay] button.

Printing with an overlay file

(1) **(2)**
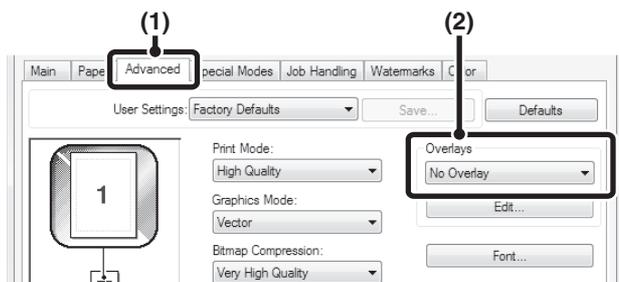
(1) Click the [Advanced] tab.

Configure the printer driver settings from the application from which you wish to print using the overlay file.

(2) Select the overlay file.

A previously created or stored overlay file can be selected from the pull-down menu.

PRINT FUNCTIONS FOR SPECIAL PURPOSES

PRINTING SPECIFIED PAGES ON DIFFERENT PAPER (Different Paper)

- **Using this function in a Windows environment**
  The front and back cover and specified pages of a document can be printed on paper that is different from the other pages. Use this function when you wish to print the front and back cover on heavy paper, or insert colored paper or a different paper type at specified pages. You can also insert paper as an insert without printing on it.

- **Using this function in a Macintosh environment**
  The front cover and last page can be printed using paper that is different from the other pages. This function can be used, for example, when you want to print only the front cover and last page on thick paper.
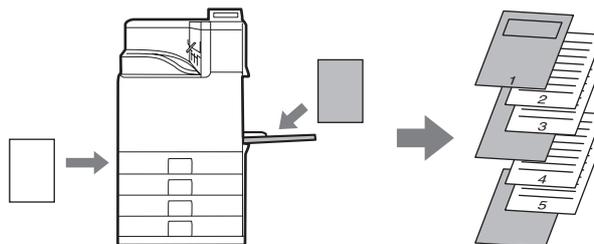
Windows
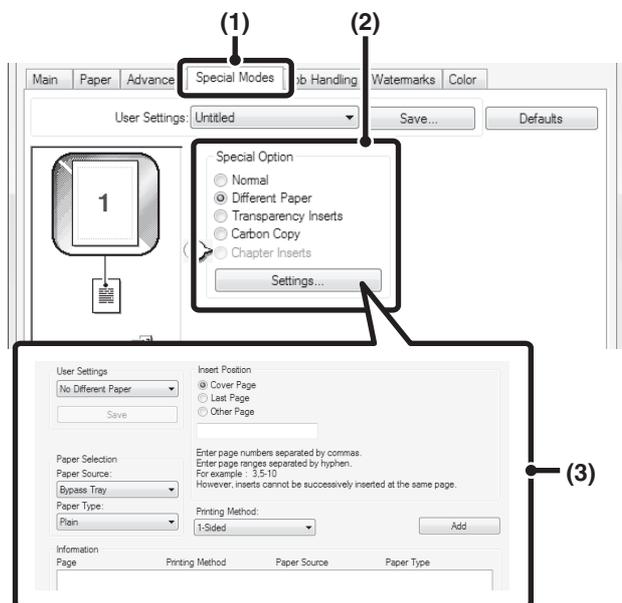
(1) **Click the [Special Modes] tab.**

(2) **Select [Different Paper] and click the [Settings] button.**

(3) **Select paper insertion settings.**

Select the insertion position, paper source, and printing method from the corresponding menus. Click the [Add] button to show the selected settings in "Information". When you have completed the settings, click the [Save] button in "User Settings" to save the settings.

- When [Bypass Tray] is selected in "Paper Source", be sure to select the "Paper Type" and load that type of paper in the bypass tray.
- **About paper insertion settings**
  When [Other Page] is selected for "Insert Position", the insert position can be specified by directly entering a page number. However, inserts cannot be successively inserted at the same page. When "Printing Method" is set to [2-Sided], the specified page and the next page after it will be printed on the front and reverse side of the paper, and thus an insert setting at a page printed on the reverse side will not be effective.

Macintosh

(This function can only be used in Mac OS 9, Mac OS X v10.4.11, v10.5 to 10.5.8 and 10.6.)

(1)   (2) (3)
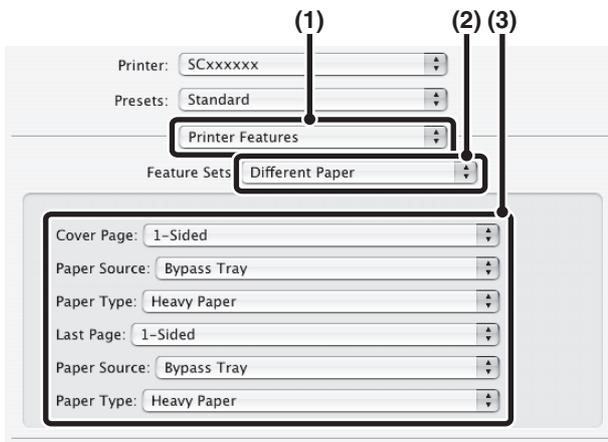
(1) Select [Printer Features].

(2) Select [Different Paper].

(3) Select cover insertion settings.

Select the print setting, paper tray, and paper type for the cover page and last page.

In Mac OS 9, select [Different Paper] and then select the settings for the cover page and last page.

ADDING INSERTS WHEN PRINTING ON TRANSPARENCY FILM (Transparency Inserts)

When printing on transparency film, this function helps prevent the sheets of transparency film from sticking together by inserting a sheet of paper between each sheet of film. It is also possible to print the same content on each inserted sheet of paper as is printed on the corresponding sheet of transparency film.
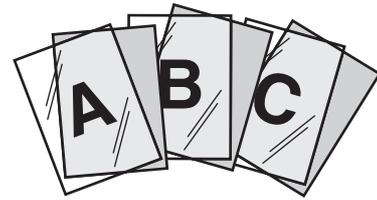
Windows
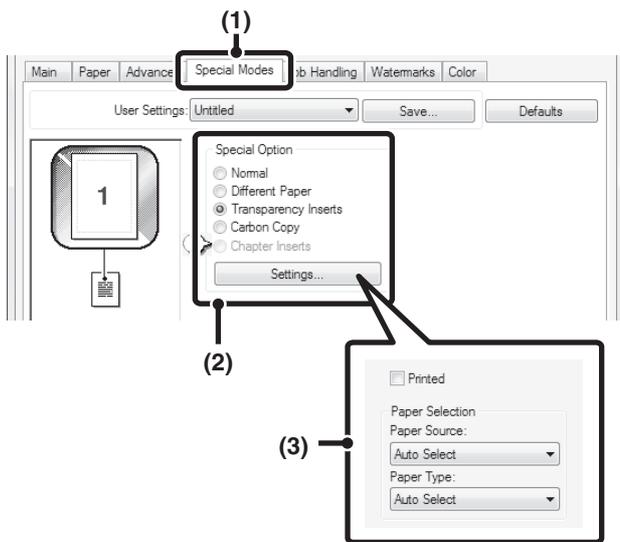
(1) Click the [Special Modes] tab.

(2) Select [Transparency Inserts] and click the [Settings] button.

(3) Select transparency insert settings.

To print the same content on the insert as is printed on the sheet of transparency film, select the [Printed] checkbox ☑. Select the paper source and type if needed.

- -

> ✎ Set [Transparency] for the "Paper Type" of the bypass tray.

Macintosh
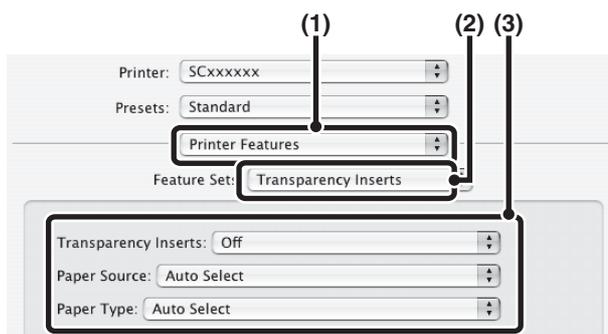
(1) Select [Printer Features].

(2) Select [Transparency Inserts].

(3) Select transparency insert settings.

To print the same content on the insert as is printed on the sheet of transparency film, select [Print] in "Transparency Inserts". Select the paper source and type if needed.

- -

> ✎ • Set [Transparency] for the "Paper Type" of the bypass tray.
> • In Mac OS X v10.2.8, select the [Transparency Inserts] checkbox ☑ in [Advanced].
> • In Mac OS 9, select [Transparency Inserts] and select from the "Transparency Inserts" menu. Select the paper source and type if needed.

PRINTING A CARBON COPY (Carbon Copy)

(This function is only available in Windows.)

This function is used to print an additional copy of the print image on paper that is the same size but from a different paper tray.
For example, if carbon copy print is selected when standard paper is loaded in tray 1 and colored paper is loaded in tray 2, a print result similar to a carbon copy slip can be obtained with a single selection of the print command. As another example, if standard paper is loaded in tray 1 and recycled paper is loaded in tray 2, Carbon Copy can simultaneously print one copy for presentation and one copy as a duplicate.
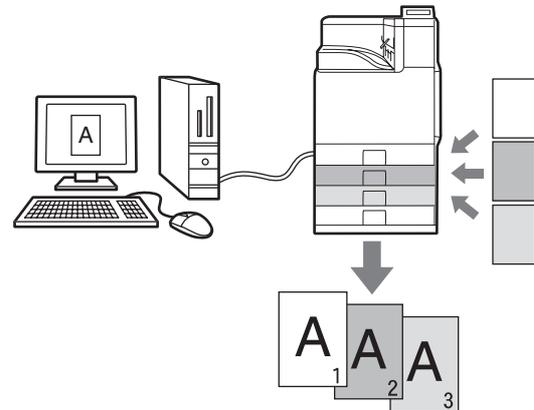
Windows
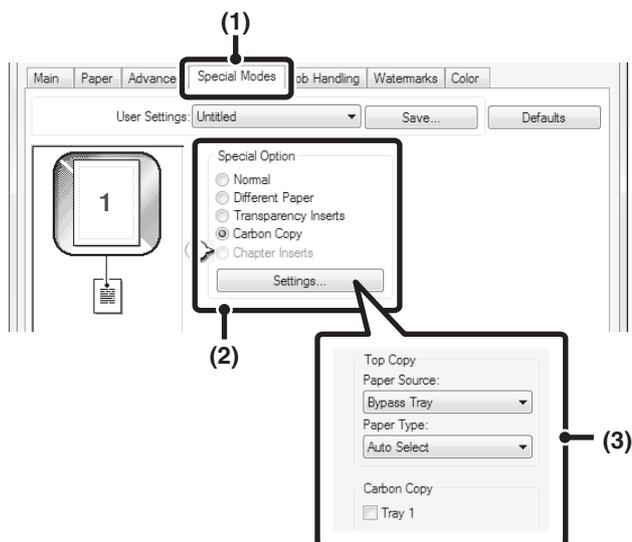
(1) Click the [Special Modes] tab.

(2) Select [Carbon Copy] and click the [Settings] button.

(3) Select the carbon copy settings.

Select the tray for the "Top Copy" and then select the tray for the carbon copy (or copies) in "Carbon Copy".

✎ When the bypass tray is selected, be sure to select the "Paper Type".

TWO-SIDED PRINTING WITH SPECIFIC PAGES PRINTED ON THE FRONT SIDE (Chapter Inserts)

(This function is only available in Windows.)

You can have specific pages printed on the front side of the paper.
When a page (such as the first page of a chapter) is specified as a front side page, the page will be printed on the front side of the paper even if would normally be printed on the reverse side (the reverse side will be left blank and the page will be printed on the front side of the next sheet of paper).

Example:
When pages 4 and 8 are specified as page settings.

Back is blank
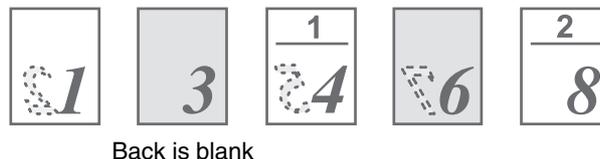
Windows

(This function can be used when the PCL6 printer driver is used.)
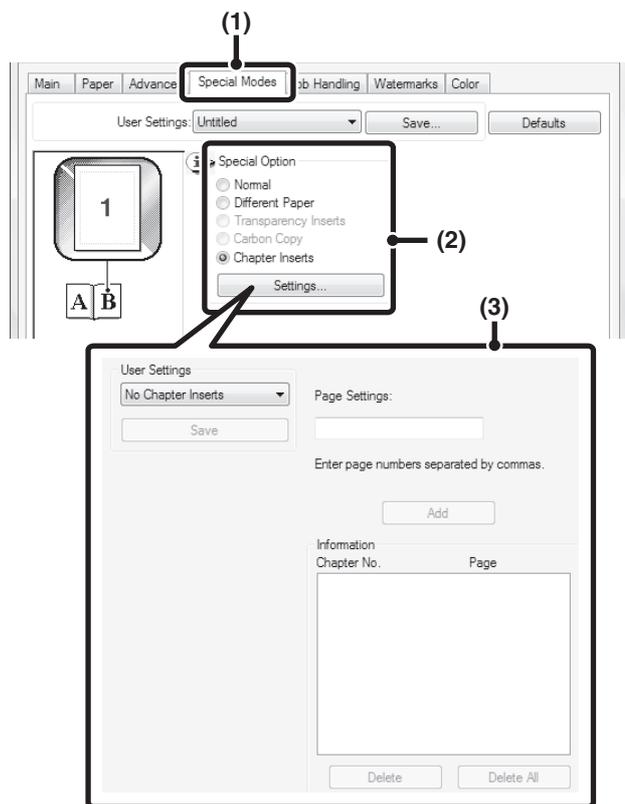
(1) Click the [Special Modes] tab.

(2) Select [Chapter Inserts] and click the [Settings] button.

(3) Select the chapter settings.

Enter the page numbers that are to begin chapters in "Page Settings". Click the [Add] button and your settings will appear in "Information". When you have finished selecting settings, click the [Save] button in "User Settings" to save the settings.

RETENTION (PRINT HOLD) FUNCTION

This function is used to store a print job as a file on the machine's hard drive, allowing the job to be printed from the operation panel when needed.

When printing from a computer, a password (5 to 8 digits) can be set to maintain the secrecy of information in a stored file.

When a password is set, the password must be entered to print a stored file from the machine.
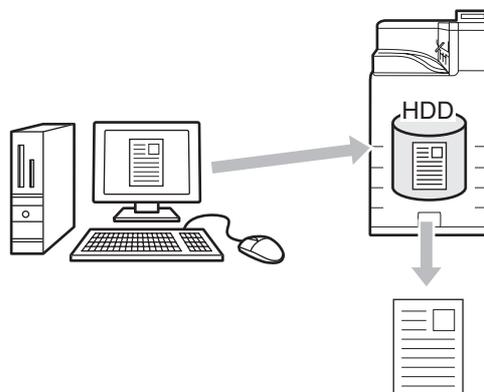
Approximate number of pages and files that can be stored by retention function

Examples of data types*1		Number of pages*2	Number of files
Full color data (Text and photo example)	Size: 8-1/2" x 11" (A4)	Max. 2000	Max. 3000
Black & white data (Text)	Size: 8-1/2" x 11" (A4)	Max. 10000	

*1 The data types above are examples to make the explanation easier to understand. The actual number of pages and number of files that can be stored will vary depending on the contents of the print images and the settings when the files are stored.

*2 The indicated numbers are guidelines for the number of pages that can be stored when all pages are full color, and when all pages are black & white.

Important points when using retention function

Note the following when using retention function:
 • Files are assigned the "Sharing" property. "Sharing" files can be retrieved and printed by anyone, and thus a password should be set for sensitive or confidential files that you do not wish others to use.
 • A file with a password is saved as a "Confidential" file. Be sure to keep the password secret.
 • Even if a file has a password, the property can be changed to "Sharing" in the Web page. Do not store sensitive documents or documents that you do not want to be used by others.
 • Except in cases provided for by law, SHARP Corporation bears no responsibility for any damages that result from the leaking of sensitive information due to manipulation by a third party of any data saved using the retention function, or incorrect operation of the retention function by the operator that saves the data.

✎ Print hold files can also be printed from the Web page. To print a file, select [Document Operations] - [Print Hold] in the Web page menu and then select the desired file. You can also view a preview of a stored file and change the property of a stored file in the Web page.

SAVING PRINT FILES (Retention)

The explanations assume that the paper size and other basic settings have already been selected. For the basic procedure for printing and the steps for opening the printer driver properties window, see the following section:

☞ Windows: BASIC PRINTING PROCEDURE (page 2-4)
☞ Macintosh: BASIC PRINTING PROCEDURE (page 2-16)

✎ In Windows, view printer driver Help for details on printer driver settings for each printing function.

[Retention] menu

Hold Only
This setting is used to hold a print job on the machine's hard drive without printing it.

Hold After Print
This setting is used to hold a print job on the machine's hard drive after it is printed.

Sample Print
When a print job is sent to the machine, only the first set of copies is printed. After checking the contents of the first set of copies, you can print the remaining sets from the operation panel of the machine. This prevents the occurrence of excessive misprints.
To print files stored on the machine's hard drive, see "PRINTING A STORED FILE" (page 2-56).

Windows
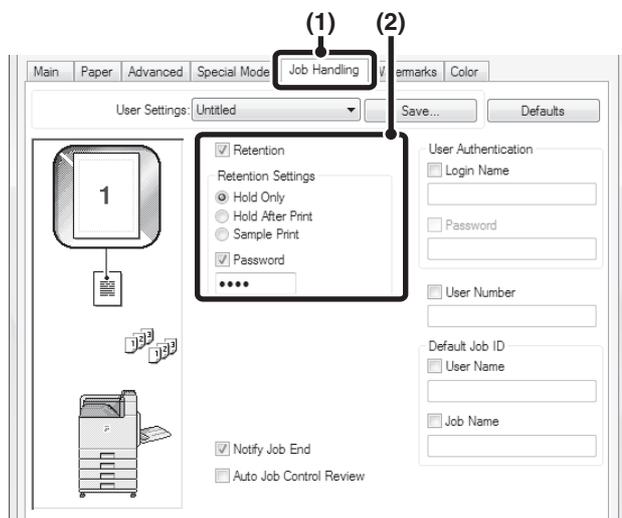
(1) **Click the [Job Handling] tab.**

(2) **Select the retention setting.**
Click the [Retention] checkbox ☑ . Select the retention method in "Retention Settings". To enter a password (5 to 8 digit number), click the [Password] checkbox ☑ .

Macintosh

(2)   **(1)**
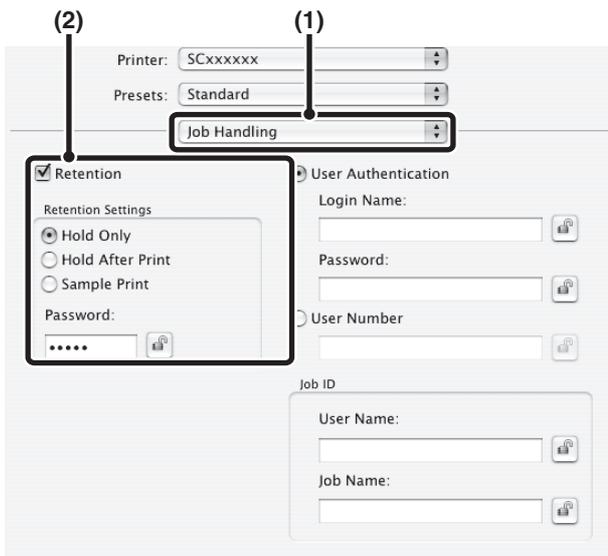
(1) Select [Job Handling].

(2) Select the retention setting.

Click the [Retention] checkbox . Select the retention method in "Retention Settings". To simplify operation the next time the same password is set, click the   (lock) button after entering the password (5 to 8 digit number).

PRINTING A STORED FILE

A file stored using retention function can be retrieved and printed when needed. The settings used when the file was stored are also stored, and thus the file can be printed again using those settings. Output settings, 2-sided printing, paper size, the number of copies, and other settings can be selected.

Keys in the display can be selected with the arrow keys and the [OK] key.
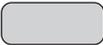
1	PRINT ⬭	**Press the [PRINT] key.**
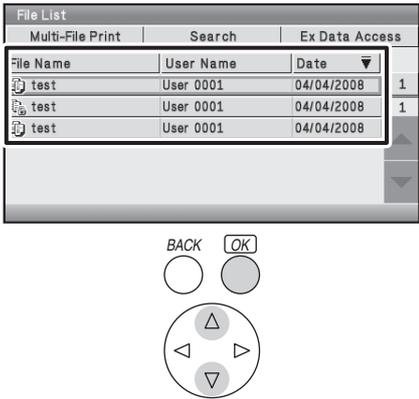
2		**Select the key of the desired file.** If a password is set for the selected file, a password entry screen will appear. Enter the password with the soft numeric keypad (5 to 8 digits) and select the [OK] key. For the procedure for entering numbers, see "Entering numbers" (page 1-9) in "1. BEFORE USING THE MACHINE".

• You can select the [File Name] key, the [User Name] key, or the [Date] key to change the order of display of the files.
• The [Multi-File Print] key can be selected to select multiple files for printing.
  ☞MULTI-FILE PRINTING (page 2-60)

3	Please select your operation. Print Delete Cancel	**Select the [Print] key.**
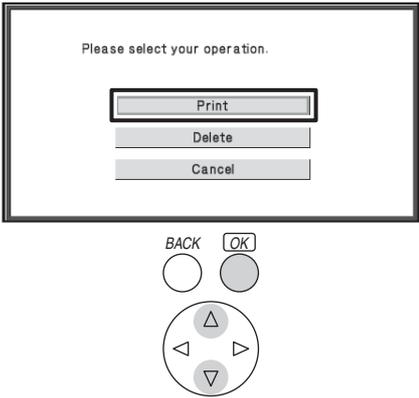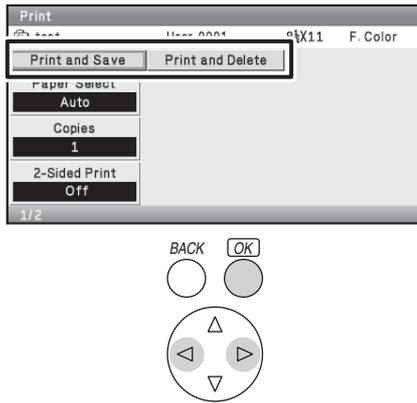
4

Print			
test	User 0001	8½X11	F. Color

Print and Save   Print and Delete

Paper Select
Auto

Copies
1

2-Sided Print
Off

1/2

BACK   OK

Select the [Print and Delete] key or the [Print and Save] key.

- If the [Print and Delete] key is selected, the files will be automatically deleted after printing.
- If the [Print and Save] key is selected, the files will be saved after printing.
- Output settings, 2-sided printing, paper size, the number of copies, and other settings can be selected. For more information, see "PRINT SETTINGS SCREEN" (page 2-59).

- A file saved in black and white or grayscale cannot be printed in color.
- If print settings are changed when a stored file is printed, the only changed setting that can be stored is the number of copies.
- The printing speed may be somewhat slow depending on the resolution and exposure mode settings of the stored file.

Automatically print all stored data

When user authentication is enabled, all retained (stored) print jobs of a user who logs in can be printed automatically after log in.
After all jobs are printed, the files are deleted.

To use the print all function, the following steps are necessary:
• "Automatically print stored jobs after login" must be enabled in [User Control] - [Default Settings] in the Web page menu. (Administrator rights are required.)
• At the time of retention print, in addition to user authentication information, **the user name stored in the machine** must be entered in "User Name" of the job ID in the printer driver.
  ☞ Windows: PRINTING WHEN THE USER AUTHENTICATION FUNCTION IS ENABLED (page 2-8)
  ☞ Macintosh: PRINTING WHEN THE USER AUTHENTICATION FUNCTION IS ENABLED (page 2-21)

(1) Log into the machine.
Enter your user number or login name and password in the user authentication screen of the machine.

(2) Perform print all.
A confirmation prompt will appear. Select the [OK] key. The print files stored in the machine will be printed automatically and then deleted.

Files with a password and files that are protected by the print hold function of the machine will not be printed.

If you do not wish to "print all"...
Select the [Cancel] key in step (2).

PRINT SETTINGS SCREEN

When a file is stored in the machine, the print settings that were in effect when the file was printed from the printer driver are also stored. However, the settings below can be changed when you print a stored file.
For the procedures for operating the settings screen, see "USING THE OPERATION PANEL" (page 1-8) in "1. BEFORE USING THE MACHINE".
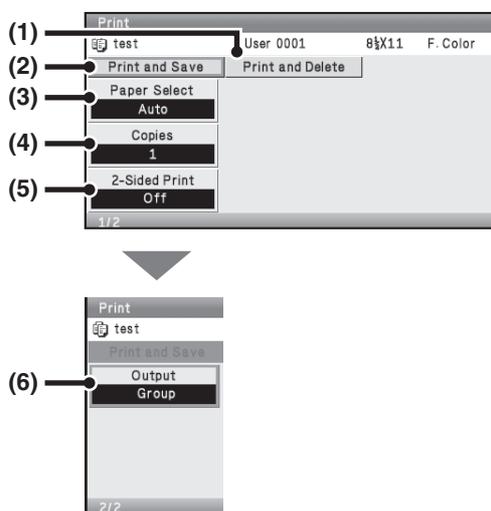
(1)   [Print and Delete] key

Printing begins when this key is selected. When printing is finished, the file will be automatically deleted.

(2)   [Print and Save] key

Printing begins when this key is selected. The file will not be deleted after printing.

(3)   [Paper Select] key

Use this key to select the paper tray from which paper is fed.

(4)   [Copies] key

Use this key to set the number of copies.

(5)   [2-Sided Print] key

Use this key to select the orientation of the image on the reverse side of the paper for 2-sided printing. To have the front and back images oriented in the same direction, select the [2-Sided Booklet] key. To have the front and back images oriented opposite to each other, select the [2-Sided Tablet] key. Note that the size and orientation of the saved image may cause these keys to have the opposite effect.
Select the [Off] key when you only wish to print on one side of the paper.

(6)   [Output] key

Use this key to select Sort, Group, Staple Sort* or Offset*.
* When a finisher is installed.

MULTI-FILE PRINTING

Multiple files in a folder can be selected for printing.

Keys in the display can be selected with the arrow keys and the [OK] key.
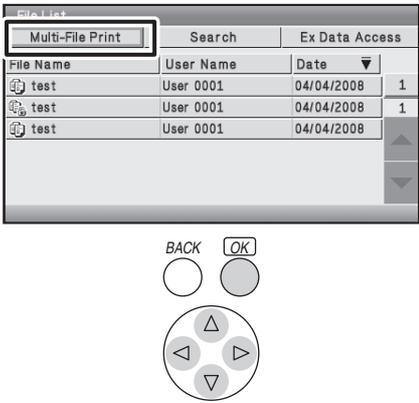
| 1 | | **Select the [Multi-File Print] key.** |

| 2 | | **Select the keys of the files that you wish to print.**
• Selected file keys will be highlighted to indicate that they have been selected.
• To cancel the selection of a file, select the highlighted file key so that it is no longer highlighted.
• To select all displayed file keys except those of confidential files, select the [Select All] key.
• The [Batch Print] key can be used to print all files of a particular user or all files that have the same password. For more information, see "Batch printing" (page 2-62). |
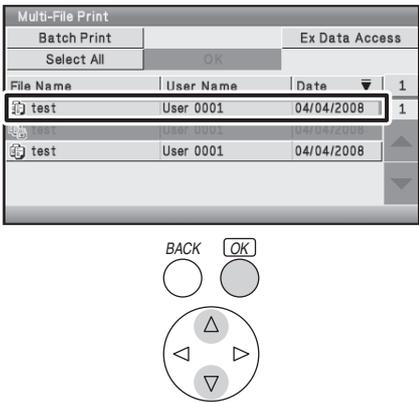
📝
- Multi-file printing of confidential files is not possible.
- If the screen is changed with the [BACK] key while a file is selected, the selection of the file will be canceled.
- When the [Select All] key is selected, it will change into the [Cancel All] key. To cancel the selection of all files that was made with the [Select All] key, select the [Cancel All] key.
- If all files are selected without using the [Select All] key, the key will not change into the [Cancel All] key. If selection of all files is canceled without using the [Cancel All] key, the key will remain the [Cancel All] key.
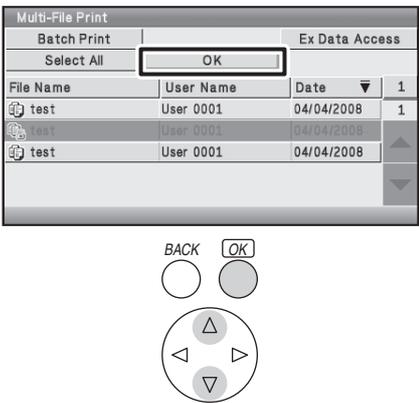
| 3 | | **Select the [OK] key**
The selected file is entered and the screen changes to the print screen. |

2-60

4

```
Multi-File Print
Number of Selected Files: 1
```
(3) —— Print and Save | Print and Delete
(2) —— Change PRT.No. Sets 1 (1~999)
(1) —— ☐ Apply the Number from Stored Setting of Each Job.

BACK *OK*

```
Sets  0 0 3  (1~999)
[↑][↓]:Change of value
[←][→]:Shift of Digit
```

BACK *OK*
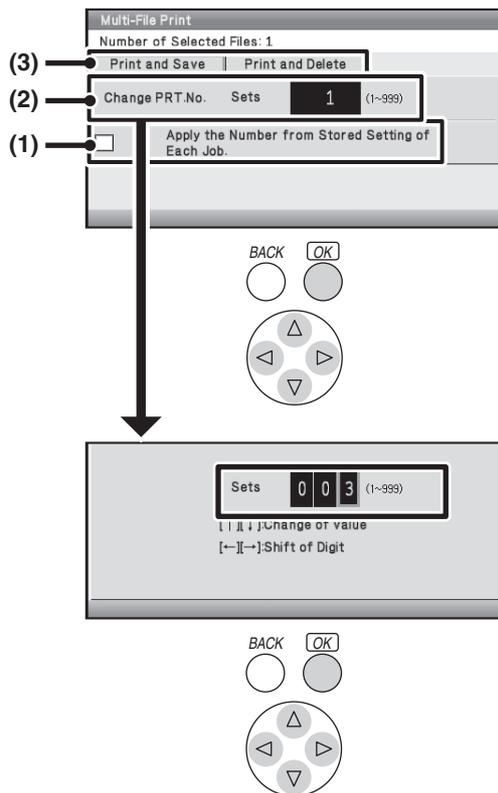
Printing a selected file.

The number of selected files appears in the number of selected files display.
If you wish to use the number of copies that was stored with the file, go to step (3).

(1) Select the [Apply the Number from Stored Setting of Each Job] checkbox so that it is not selected (☐).

(2) Set the number of copies.

Select the number with the ▽ △ keys and use the ◁ ▷ keys to move the frame to the next place.
After entering the number, press the [OK] key.
☞ "Entering numbers" (page 1-9) in "1. BEFORE USING THE MACHINE".

(3) Select the [Print and Delete] key or the [Print and Save] key.

- If the [Print and Delete] key is selected, the files will be automatically deleted after printing.
- If the [Print and Save] key is selected, the files will be saved after printing.

2-61

Batch printing

All files that have the same user name and password can be printed at once. When the [Multi-File Print] key is selected, it changes into the [Batch Print] key.

Keys in the display can be selected with the arrow keys and the [OK] key.

1
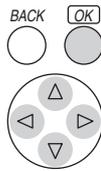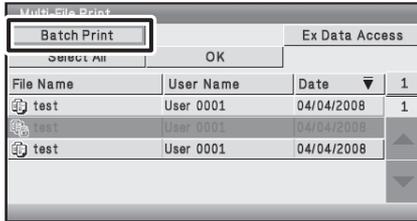
Select the [Batch Print] key.

2

Select the [User Name] key.

When user authentication is used, the user name that was used for login is automatically selected.

2-62

3

(A)
(B)
(C)

(D)
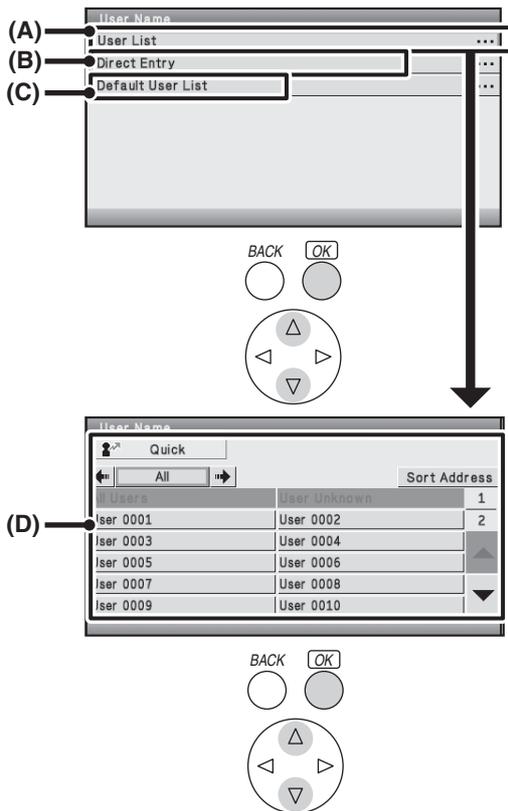
Select the user name.

There are three ways to select the user name:

(A) Select the [User List] key and press the [OK] key.
A user list (D) appears. Select with the ▽ △ ◁ ▷ keys and press the [OK] key.
If you accidentally select the wrong user name, select the key of the correct name.
If the [Quick] key is selected, an area for entering the "Registration No." [----] appears in the message display. Use the soft numeric keypad to enter the "Registration No." that has been set in [User Control] - [User List] in the Web page (administrator). For the procedure for entering numbers, see "Entering numbers" (page 1-9) in "1. BEFORE USING THE MACHINE". This will allow you to select the user name.

(B) Select the [Direct Entry] key and press the [OK] key.
A text entry screen appears. Directly enter the user name.

(C) Select the [Default User List] key and press the [OK] key.
The user name can be selected from the factory stored users.

✎ When [Selection of [All Users] is not allowed] checkbox and [Selection of [User Unknown] is not allowed] checkbox are disabled in "Print Hold Setting" (Web page only) in the system settings (administrator), the [All Users] key and [User Unknown] key can be selected.
The [All Users] key can be selected to select all files in the folder (the files of all users).
The [User Unknown] key can be selected to select all files in the folder that do not have a user name.

4

Batch Print

Print and Save | Print and Delete | Delete the Data

User Name | User 0001

Password

Change PRT.No. Sets | ■ (1~999)

☑ Apply the Number from Stored Setting of Each Job.

BACK OK

If a password has been established, select the [Password] key.

Enter the password with the soft numeric keypad (5 to 8 digits) and select the [OK] key. For the procedure for entering numbers, see "Entering numbers" (page 1-9) in "1. BEFORE USING THE MACHINE". Only files that have the same password will be selected.
If you do not wish to enter a password, go to the next step.

5

Batch Print

Print and Save | Print and Delete | Delete the Data

User Name | User 0001

Password | ********

(2) — Change PRT.No. Sets | 3 (1~999)

(1) — ☐ Apply the Number from Stored Setting of Each Job.

BACK OK

Sets | 0 0 3 (1~999)

[↑][↓]:Change of value
[←][→]:Shift of Digit

BACK OK

To change the number of copies, configure the settings.

If you wish to use the number of copies stored with each file, go to step 6.

(1) Select the [Apply the Number from Stored Setting of Each Job] checkbox so that it is not selected (☐).

(2) Set the number of copies.

Select the number with the ▽ △ keys and use the ◁ ▷ keys to move the frame to the next place.
After entering the number, press the [OK] key.
☞ "Entering numbers" (page 1-9) in "1. BEFORE USING THE MACHINE".

6

Batch Print

Print and Save | Print and Delete | Delete the Data

User Name | User 0001

Password | ********

Change PRT.No. Sets | 3 (1~999)

☐ Apply the Number from Stored Setting of Each Job.
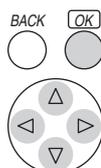
BACK OK

Select the [Print and Delete] key or the [Print and Save] key.

• If the [Print and Delete] key is selected, the files will be automatically deleted after printing.
• If the [Print and Save] key is selected, the files will be saved after printing.

All files that match the current search conditions can be deleted by selecting the [Delete the Data] key.

DELETING A STORED FILE

Stored files that are no longer needed can be deleted.

☞PRINTING A STORED FILE (page 2-56)

Keys in the display can be selected with the arrow keys and the [OK] key.
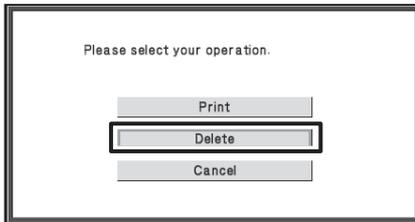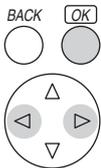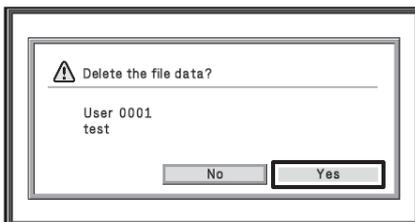
1	Please select your operation. Print Delete Cancel BACK OK	**Select the [Delete] key.**
2	⚠ Delete the file data? User 0001 test No Yes BACK OK	**Check the file and then select the [Yes] key.**

✎ A file whose property is "Protect" cannot be deleted. To delete a protected file, change its property to "Sharing" or "Confidential".
This setting can be configured in [Print Hold] in [Document Operations] in the Web page menu.

Automatic deletion of files

You can have stored data automatically deleted at regular intervals by specifying a periodic deletion time. Periodic deletion of files stored in the machine helps to prevent the leaking of sensitive information and frees space on the hard drive.

Every day, every week, or every month can be selected for the deletion cycle, and a time can be set for each selection. For example, you can set file deletion to take place every week on Friday at 6:00 PM.

Automatic file deletion settings are configured in "Automatic Deletion of File Settings" (Web page only) in the system settings (administrator).

To check the settings, print the following list in the system settings.

To check information on the deletion cycle: Print "Print Hold" of the "Administrator Settings List" (Web page only) in the system settings (administrator).

When "Automatic Deletion of File Settings" (Web page only) is enabled in the system settings (administrator), all files will be deleted when the set time arrives.

• **System Settings (Administrator): Automatic Deletion of File Settings (Web page only)**
Configure settings for automatic deletion at regular intervals of files stored using the print hold function.

• **System Settings (Administrator): Administrator Settings List (Web page only)**
Use this to print a list of the administrator settings, including print hold settings.

2-66

SEARCHING FOR A STORED FILE

When there are many stored files, it may take time to find a file. The search function can be used to find a file quickly. Searching is possible even when you only know part of the file name.

Keys in the display can be selected with the arrow keys and the [OK] key.
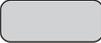
1	PRINT ⬜	**Press the [PRINT] key.**

2	File List Multi-File Print / Search / Ex Data Access File Name / User Name / Date ▼ 📄 test / User 0001 / 04/04/2008 / 1 📄 test / User 0001 / 04/04/2008 / 1 📄 test / User 0001 / 04/04/2008 BACK ⬤ OK ⬤ △ ◁ ▷ ▽	**Select the [Search] key.**
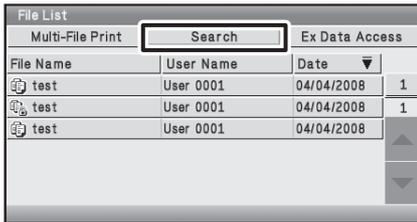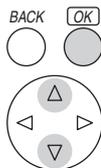
3	Search Start Search User Name File Name BACK ⬤ OK ⬤ △ ◁ ▷ ▽	**Select the [User Name] key or the [File Name] key.** • If you know the user name, select the [User Name] key and go to "Using the user name to search" in step 4. • If you know the file name, select the [File Name] key and go to "Using the file name to search" in step 4.

2-67
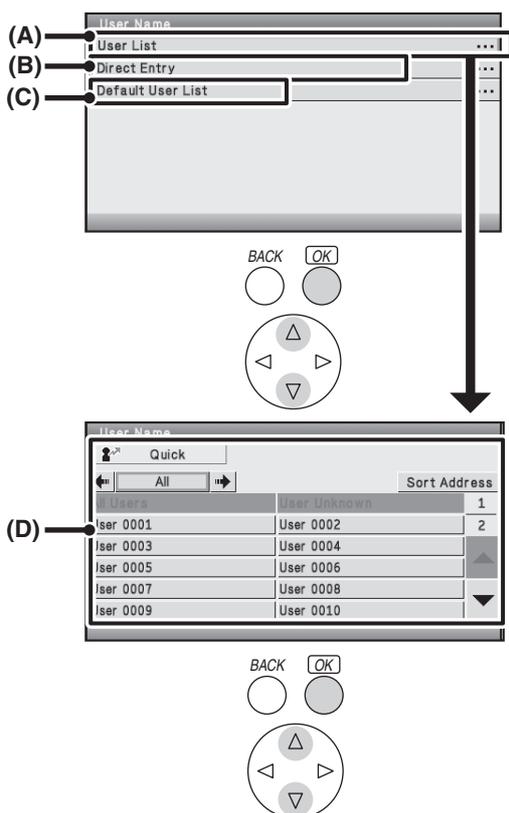
Using the user name to search

There are three ways to select the user name:

(A) Select the [User List] key and press the [OK] key.
A user list (D) appears. Select with the $\triangledown$ $\triangle$ $\triangleleft$ $\triangleright$ keys and press the [OK] key.
If you accidentally select the wrong user name, select the key of the correct name.
If the [Quick] key is selected, an area for entering the "Registration No." [----] appears in the message display. Use the soft numeric keypad to enter the "Registration No." that has been set in [User Control] - [User List] in the Web page (administrator). For the procedure for entering numbers, see "Entering numbers" (page 1-9) in "1. BEFORE USING THE MACHINE". This will allow you to select the user name.

(B) Select the [Direct Entry] key and press the [OK] key.
A text entry screen appears. Directly enter the user name. Searching is possible even if you only enter the first several letters of the user name.

(C) Select the [Default User List] key and press the [OK] key.
The user name can be selected from the factory stored users.

After the user name is selected, the [Password] key can be selected. To search for files of the selected user name that have a certain password, select the [Password] key and enter the password.
(It is not possible to search using a password only.)

Using the file name to search

Enter the file name in the text entry screen that appears and select the [OK] key.
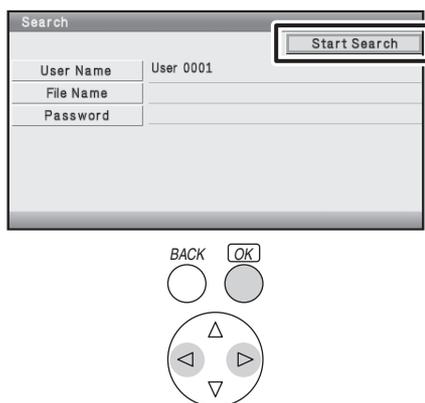
Select the [Start Search] key.

The search results will appear in a screen similar to the following screen. A list of the files that match your search criteria will appear. Select the desired file from the list. The job settings screen will appear.
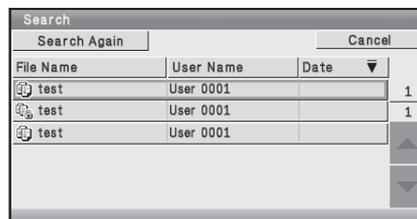
To return to the list screen of print hold data, select the [Cancel] key.
To return to the file search screen, select the [Search Again] key.

You can also use the Web pages to search for a file. Click [Document Operations], [Print Hold], and then [Search] in the Web page menu.

PRINTING WITHOUT THE PRINTER DRIVER

When you do not have the printer driver installed on your computer, or when the software application used to open a file that you wish to print is not available, you can print directly to the machine without using the printer driver.
The file types (and corresponding extensions) that can be printed directly are shown below.

File Type	TIFF	JPEG	PCL	PDF/ Encrypted PDF	PS	XPS
Extension	tiff, tif	jpeg, jpg, jpe, jfif	pcl	pdf	ps	xps

> • Even if the print result is black and white, the following types of print jobs will be counted as 4-color (Y (Yellow), M (Magenta), C (Cyan), and Bk (Black)) print jobs. To be always counted as a black and white job, select black and white printing.
>   - When the data is created as color data.
>   - When the application treats the data as color data even though the data is black and white.
>   - When an image is hidden under a black and white image.
> • To print XPS files, the XPS expansion kit must be installed.
> • Depending on the file type, it may not be possible to print some files in the above table.

DIRECTLY PRINTING FROM THE MACHINE

A file on an FTP server, in a network folder or in a USB memory device connected to the machine can be selected and printed from the operation panel of the machine without using the printer driver.

2-69
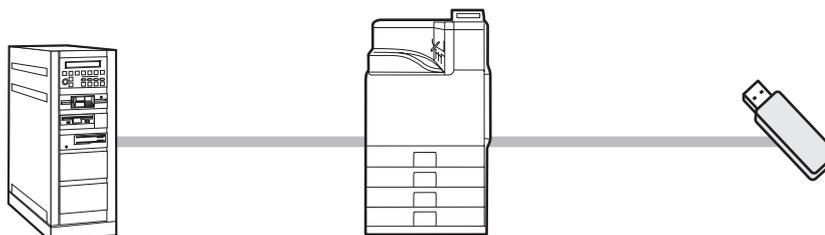
DIRECTLY PRINTING A FILE ON AN FTP SERVER

When an FTP server is configured in the machine's Web pages, you can specify and print a file on the FTP server from the operation panel of the machine. This saves you the trouble of downloading the file and printing it from a computer.

✎ To configure FTP server settings, click [Application Settings] and then [Setting for Print from the Machine (FTP)] in the Web page menu. (Administrator rights are required.) Up to 20 FTP servers can be configured.

Keys in the display can be selected with the arrow keys and the [OK] key.

1
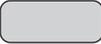
PRINT ⬜

Press the [PRINT] key.

2
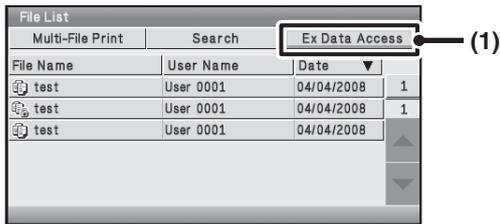
Access the FTP server.

(1) Select the [Ex Data Access] key.

(2) Select the [FTP] key.

The [FTP] key cannot be selected when any FTP server has not been configured.

3
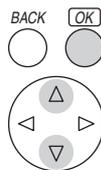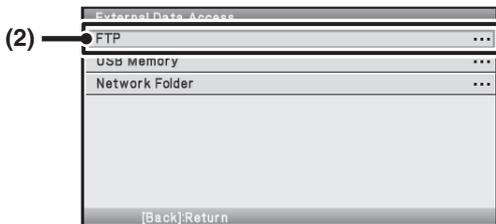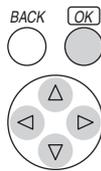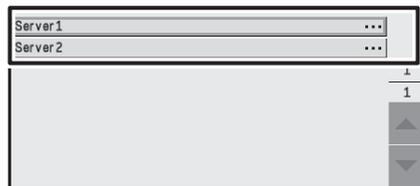
Select the key of the FTP server that you wish to access.
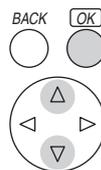
4
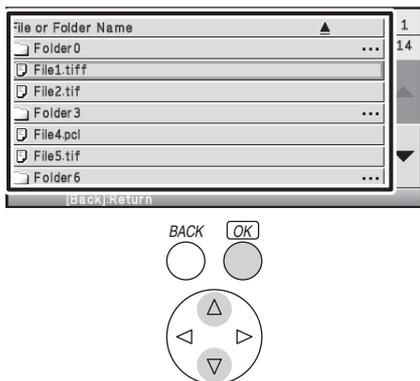
Select the key of the file that you wish to print.

- The ![icon] icon appears to the left of keys of files that can be printed.
- The ![icon] icon is displayed to the left of keys of folders on the FTP server. To display the files and folders in a folder, select the key of the folder.

- A total of 100 keys of files and folders can be displayed.
- Press the [BACK] key to move up one folder level.
- Select the [File or Folder Name] key and press the [OK] key to change the order of the files and folders displayed on the screen. The order switches between ascending order and descending order each time you press the [OK] key.

5

Print the selected file.

(1) Select print conditions.

If you selected a file (PCL, PS, or XPS) in step 4 that includes print settings, the settings will be applied.

(2) Select the [Print] key.

Printing begins. When the message appears in the display, select the [OK] key.

When you select a PDF file that has a password, you must enter the password in the job status screen to begin printing.
☞ PRINTING AN ENCRYPTED PDF FILE (page 2-81)

DIRECTLY PRINTING A FILE IN USB MEMORY

A file in a USB memory device connected to the machine can be printed from the operation panel of the machine without using the printer driver. When the printer driver of the machine is not installed on your computer, you can copy a file into a commercially available USB memory device and connect the device to the machine to print the file directly.

Keys in the display can be selected with the arrow keys and the [OK] key.
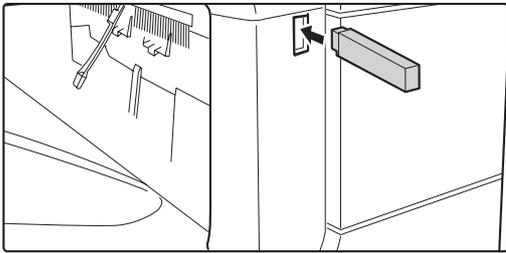
1	**Connect the USB memory device to the machine.**
	Use a FAT32 USB memory with a capacity of no more than 32 GB.

2	*PRINT* **Press the [PRINT] key.**
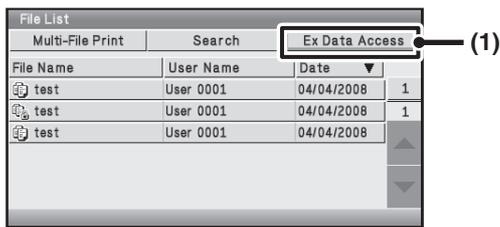
3	**Access the USB memory device.**
(1)	**(1) Select the [Ex Data Access] key.**
(2)	**(2) Select the [USB Memory] key.**
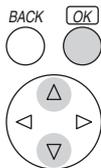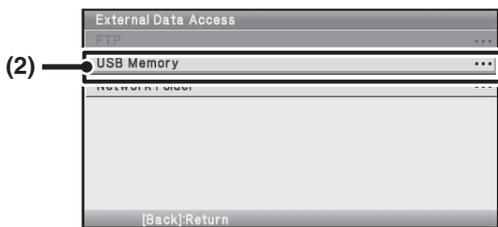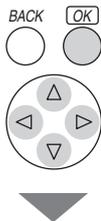
4
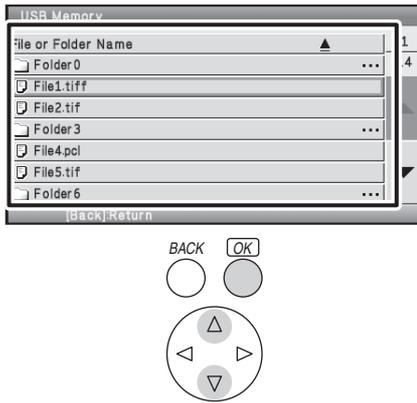
Select the key of the file that you wish to print.

- The ▤ icon appears to the left of keys of files that can be printed.
- The ▢ icon is displayed to the left of keys of folders in the USB memory. To display the files and folders in a folder, select the key of the folder.

- A total of 100 keys of files and folders can be displayed.
- Press the [BACK] key to move up one folder level.
- Select the [File or Folder Name] key and press the [OK] key to change the order of the files and folders displayed on the screen. The order switches between ascending order and descending order each time you press the [OK] key.

5

Print the selected file.

(1) Select print conditions.

If you selected a file (PCL, PS, or XPS) in step 4 that includes print settings, the settings will be applied.

(2) Select the [Print] key.

Printing begins after the selected file is transferred. When the message appears in the display, select the [OK] key.

To cancel printing...
To cancel printing while the file is being transferred, select the [Cancel] key in the message screen that appears in the display.

6

Remove the USB memory device from the machine.

When you select a PDF file that has a password, you must enter the password in the job status screen to begin printing.
☞ PRINTING AN ENCRYPTED PDF FILE (page 2-81)

DIRECTLY PRINTING A FILE IN A NETWORK FOLDER

You can use the machine's operation panel to select and print a file on a server or in a shared folder of an individual's computer on the same network as the machine.

Keys in the display can be selected with the arrow keys and the [OK] key.

1

PRINT

Press the [PRINT] key.

2

(1)

(2)
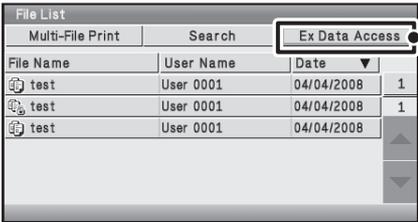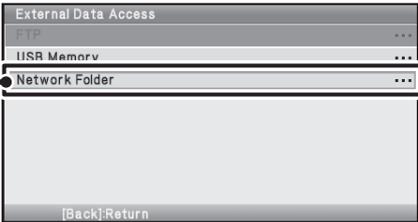
Access the network.

(1)   Select the [Ex Data Access] key.

(2)   Select the [Network Folder] key.
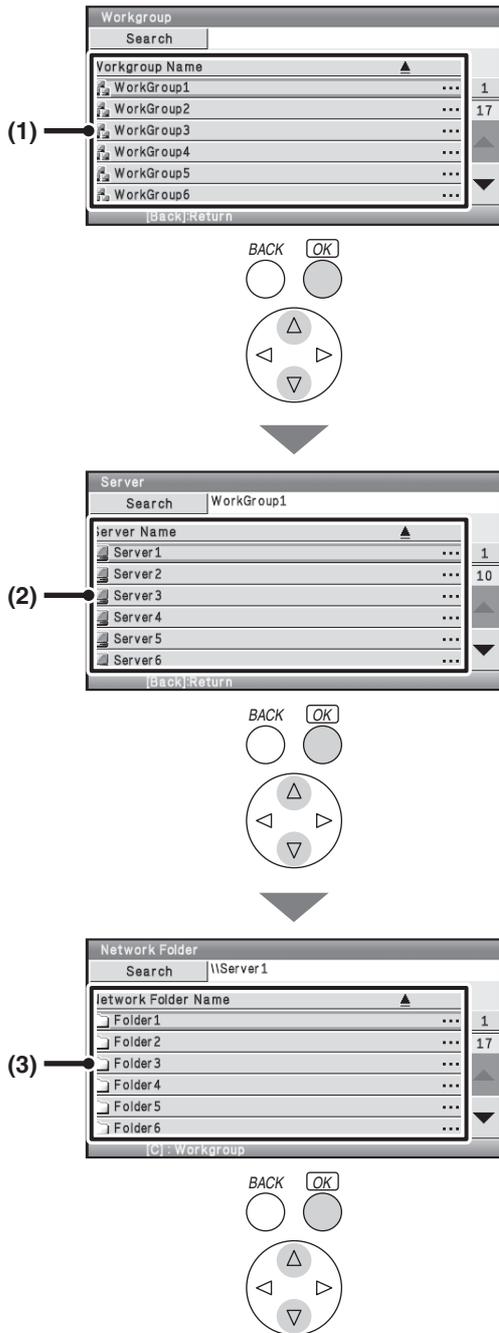
Access the network folder.

(1) Select the key of the workgroup that you wish to access.

(2) Select the key of the server or computer that you wish to access.

If a screen appears prompting you to enter a user name and password, check with your server administrator and enter the appropriate user name and password.

(3) Select the key of the network folder.

- You can select the [Search] key and enter a keyword to search for a workgroup, server, or network folder. For the procedure for entering text, see "ENTERING TEXT" (page 1-75) in "1. BEFORE USING THE MACHINE".
- Up to 100 workgroups, 100 servers, and 100 network folders can be displayed.
- Press the [BACK] key to move up one folder level.
- To change the sorting order of the displayed keys, select the key that shows ▲ or ▼ in each screen. The order switches between ascending order and descending order each time you press the [OK] key.
- To go to a particular page, select the key that shows the current page number and enter the desired page number.
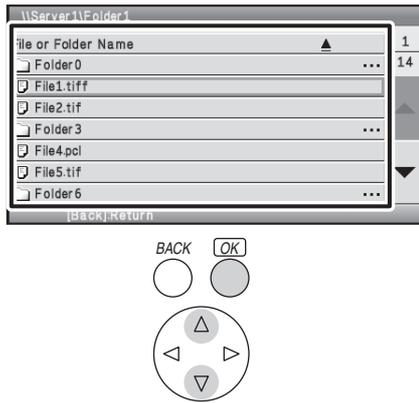
2-75

4

\\Server1\Folder1	
ile or Folder Name ▲	1
📄 Folder 0 ...	14
📄 File1.tiff	
📄 File2.tif	
📄 Folder 3 ...	
📄 File4.pcl	
📄 File5.tif	
📄 Folder 6 ...	
[Back]:Return	

BACK   OK

Select the key of the file that you wish to print.

- The 📄 icon appears to the left of keys of files that can be printed.
- The 📁 icon is displayed to the left of keys of folders in the network folder. To display the files and folders in a folder, select the key of the folder.

- -

- A total of 100 keys of files and folders can be displayed.
- Press the [BACK] key to move up one folder level.
- Select the [File or Folder Name] key and press the [OK] key to change the order of the files and folders displayed on the screen. The order switches between ascending order and descending order each time you press the [OK] key.

5

(1) ——

Print
File1.tiff
Print
Paper Select
Auto

(2) ——

Copies
1
2-Sided Print
Off
1/2

BACK   OK

Print
File1.tiff
Print
Output
Sort
Other Settings
2/2

Print the selected file.

(1) Select print conditions.

If you selected a file (PCL, PS, or XPS) in step 4 that includes print settings, the settings will be applied.

(2) Select the [Print] key.

Printing begins after the selected file is transferred. When the message appears in the display, select the [OK] key.

When you select a PDF file that has a password, you must enter the password in the job status screen to begin printing.
☞

DIRECTLY PRINTING FROM A COMPUTER

Settings can be configured in the Web pages of the machine to enable direct printing from a computer without using the printer driver.

SUBMIT PRINT JOB

You can specify a file to be printed directly without using the printer driver.
In addition to a file on your computer, this procedure can be used to print any file that can be accessed from your computer, such as a file on another computer connected to the same network.
To directly print a file on a computer, click [Document Operations] and then [Submit Print Job] in the Web page menu.

FTP PRINT

You can print a file from your computer by simply dragging and dropping the file onto the FTP server of the machine.

- **Configuring settings**
  To enable FTP Print, click [Application Settings] and then [Setting for Print from the PC] in the Web page menu, and configure the port number. (Administrator rights are required.)

- **Performing FTP Print**
  Type "ftp://" and then the IP address of the machine in the address bar of your computer's Web browser as shown below.
  (Example)
  ftp://192.168.1.28

Drag and drop the file that you wish to print onto the "lp" folder that appears in your Web browser. The file will automatically begin printing.

> • If you printed a file (PCL, PS, or XPS) that includes print settings, the settings will be applied.
>
> • When user authentication is enabled, the print function may be restricted. For more information, ask your administrator.

E-MAIL PRINT

An e-mail account can be configured in the machine to have the machine periodically check your mail server and automatically print received e-mail attachments without using the printer driver.

- **Configuring settings**
  To use E-mail Print, you must first configure an e-mail account in the machine. To configure an account, click [Application Settings] and then [E-mail Print Settings] in the Web page menu. (Administrator rights are required.)

- **Using E-mail Print**
  To print a file using E-mail Print, use your e-mail program on your computer to send the file as an attachment to the machine's e-mail address.

  Control commands can be entered in the message of the e-mail to specify the number of copies and print format. Commands are entered in the format "command name=value".
  As an example, the control commands include the following:

Function	Command name	Values
Copies	COPIES	1-999
Staples*1	STAPLEOPTION	NONE, ONE
Output	COLLATE	OFF, ON
2-sided print	DUPLEX	OFF, TOP, LEFT, RIGHT
Account number*2	ACCOUNTNUMBER	Number (5 to 8 digits)
File type	LANGUAGE	PCL, PCLXL, POSTSCRIPT, PDF, TIFF, JPG, XPS
Paper	PAPER	Name of available paper (LETTER, A4, etc.)
Print hold	FILE	OFF, ON
Black & white printing	B/W PRINT	OFF, ON
Fit to page	FITIMAGETOPAGE	OFF, ON

Example

```
COPIES=2
DUPLEX=LEFT
ACCOUNTNUMBER=11111
PAPER=LETTER
B/W PRINT=ON
```

*1 Only effective when a finisher is installed.
*2 Can be omitted except when authentication is by user number.

- Enter the commands in Plain Text format. If entered in Rich Text format (HTML), the commands will have no effect.
- To receive a list of the control commands, enter the command "Config" in the e-mail message.
- If nothing is entered in the body text (message) of the e-mail, printing will take place according to the "Printer Default Settings" (Web page only) in the system settings. If you printed a file (PCL, PS, or XPS) that includes print settings, the settings will be applied.
- Only enter a "File type" when you are specifying a page-description language. Normally there is no need to enter a file type.

CHECKING THE PRINT STATUS

JOB STATUS SCREEN

The job status screen is displayed when the [JOB STATUS] key on the operation panel is pressed. The job status screen shows the status of jobs by mode. When the [JOB STATUS] key is pressed, the job status screen of the mode that was being used before the key was pressed appears.
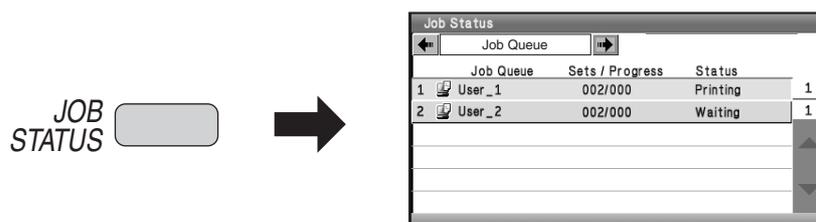
SPOOL SCREEN/JOB QUEUE SCREEN/COMPLETED JOB SCREEN

The job status screen consists of the job queue screen that shows print jobs waiting to be printed and the job currently in progress, the completed job screen that shows jobs that have been completed, and the spool screen that shows print jobs that have been spooled and encrypted PDF jobs that are waiting for a password to be entered.
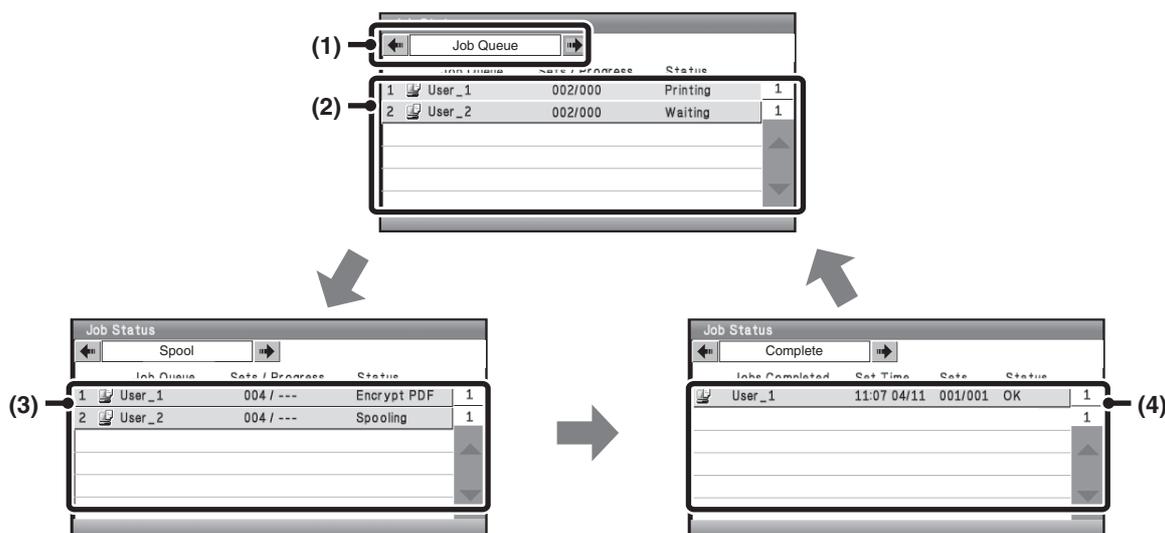
(1) Job status screen selector keys (◀ ▶)
Select these keys to switch through the job queue screen, the completed jobs screen, and the spool screen.

(2) Job list (job queue screen)
Jobs waiting to be printed appear in the job queue as keys. The jobs are printed in order from the top of the queue. Each job key shows information on the job and the current status of the job.

(3) Job list (spool screen)
Spooled print jobs and encrypted PDF print jobs that require a password to be entered are displayed.

(4) Job list (completed jobs screen)
This shows up to 99 completed jobs. The result (status) of each completed job is shown.

Job key display

Each job key shows the position of the job in the job queue and the current status of the job.
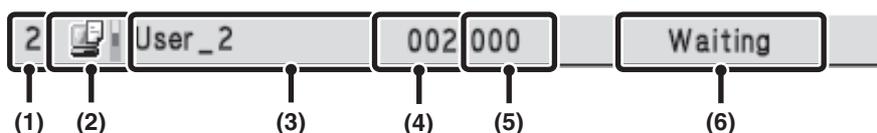
(1)   Indicates the number (position) of the job in the job queue.

When the job currently being printed is finished, the job moves up one position in the job queue.
This number does not appear in keys in the completed jobs screen.

(2)   Mode icon

The ⊡ icon appears when the job is a print job. In the completed jobs screen, a color bar appears next to the icon to indicate whether the job was executed in color or black & white. (However, the color bar icon does not appear in the key of a job that used retention function.)

(3)   User name

The computer login name of the user will appear in the print job.
A "User Name" can be entered in the printer driver to display the name of the user who executed the job.

(4)   Number of sets entered

This shows the number of sets specified.

(5)   Number of completed sets

This shows the number of sets completed. "000" appears while the job is waiting in the job queue.

(6)   Status

Shows the job status.

Message	Status
"Printing"	Printing is in progress.
"Waiting"	The job is waiting to be executed.
"Toner Empty"	The toner cartridge is out of toner. Replace the toner cartridge with a new cartridge.
"Paper Empty"	The paper used for the job has run out. Add paper or change to a different paper tray.
"Limit"	The printing page limit has been exceeded. Check with the administrator of the machine.
"Error"	An error occurred while the job was being executed. Clear the error condition.
"Rendering"	Analyzing print data.
"Spooling"	Print data is being received or a job is waiting for analysis after being spooled.
"Encrypt PDF"	Upon analysis, if a spooled job is found to be an encrypted PDF, it changes to the password entry wait state.

PRINTING AN ENCRYPTED PDF FILE

Encrypted PDF is used to protect a PDF file by requiring the entry of a password to print or edit the file. To directly print an encrypted PDF file on an FTP server or in a USB memory device, etc. connected to the machine, follow the steps below to enter the password and begin printing.

Keys in the display can be selected with the arrow keys and the [OK] key.

1	*JOB STATUS*	**Press the [JOB STATUS] key.**
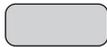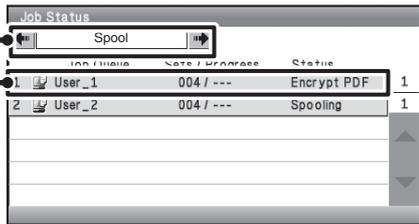
2	(1) Spool (2) 1 User_1 004 / --- Encrypt PDF 1 2 User_2 004 / --- Spooling 1 BACK OK	**Select the encrypted PDF print job.** **(1) Change the print job status mode to [Spool].** Select either of the ◀◼ ◼▶ keys with the ◁ ▷ keys and press the [OK] key. The mode changes each time the [OK] key is pressed. **(2) Select the print job key of the PDF file that has the password.**

3	Job Status Enter the password? 1 2 No Yes BACK OK	**Select the [Yes] key.** A text entry screen appears. Enter the password (32 characters or less) and select the [OK] key. The print job is released and moved to the [Job Queue].

> ✎ When both a master password and a user password (which is used to open the file) have been set, enter the master password.

> ✎ • To print an encrypted PDF file using the printer driver, enter the password when opening the file on your computer.
> • Printing is not possible if you do not know the password for an encrypted PDF file. To delete a spooled print job, select the [No] key in the screen of step 3 and select the [Stop/Delete] key.
> • Encrypted PDF versions that can be directly printed are 1.6 (Adobe® Acrobat® 7.0) and earlier.

PRINTING

GIVING A PRINT JOB PRIORITY/CANCELING A PRINT JOB

GIVING A PRINT JOB PRIORITY

You can give priority to a print job that is waiting to be printed and print it ahead of the other jobs.

Keys in the display can be selected with the arrow keys and the [OK] key.

1

JOB STATUS

Press the [JOB STATUS] key.

2

(1)
(2)

```
Job Status
      Job Queue
   Job Queue    Sets / Progress   Status
1  User 1       002/000           Printing    1
2  User_2       002/000           Waiting      1
```

BACK   OK

```
Please select your operation.

      Stop/Delete
      Priority          ──── (3)
      Detail
      Cancel
```

BACK   OK
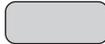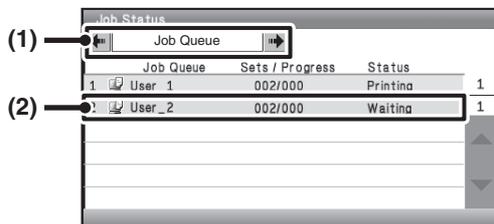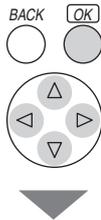
Give the desired job priority.

(1) Change the print job status mode to [Job Queue].

Select either of the 　 　 keys with the 　 　 keys and press the [OK] key. The mode changes each time the [OK] key is pressed.

(2) Select the key of the print job to which you want to give priority.

(3) Select the [Priority] key.

The job being printed stops and the job selected in (3) is printed.
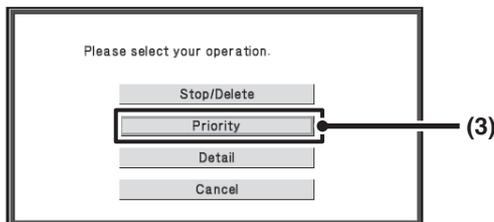
✎ To check print information on the selected job, select the [Detail] key.

CANCELING A PRINT JOB

A job being printed, a job waiting to be printed, or a spooled job can be canceled.

Keys in the display can be selected with the arrow keys and the [OK] key.

1

Press the [JOB STATUS] key.

JOB STATUS

2
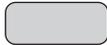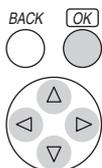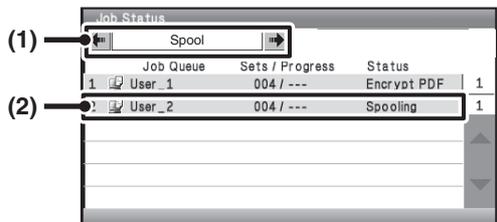
Cancel the job.

(1) Change the print job status mode to [Spool] or [Job Queue].

Select either of the ◀ ▶ keys with the ◁ ▷ keys and press the [OK] key. The mode changes each time the [OK] key is pressed.

(2) Select the key of the print job that you wish to cancel.

(3) Select the [Stop/Delete] key.

(4) A message appears to confirm the cancelation. Select the [Yes] key.

The selected job key is deleted and printing is canceled.
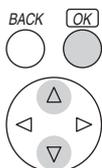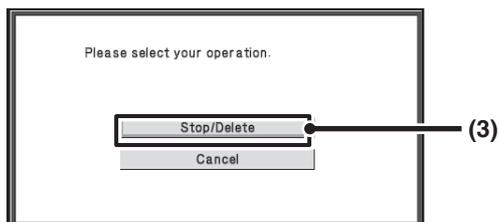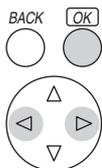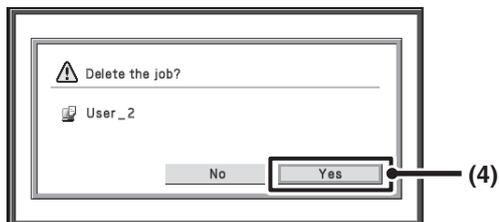
It is also possible to cancel printing with the [STOP] key (⊘) on the operation panel. When the [STOP] key (⊘) is pressed, a message will appear asking you if you want to cancel the job.

If you do not want to cancel the selected print job...
Select the [No] key in step (5).

CHANGING TO ANOTHER PAPER SIZE AND PRINTING WHEN PAPER RUNS OUT

If printing stops because the machine ran out of paper, or if the size of paper specified in the printer driver is not loaded in the machine, a message will appear in the display. Printing will begin automatically when the [OK] key is selected and paper is loaded in the machine. If you wish to print on paper in another tray because the desired size of paper is not immediately available, follow the steps below.

Keys in the display can be selected with the arrow keys and the [OK] key.
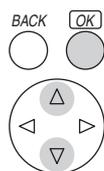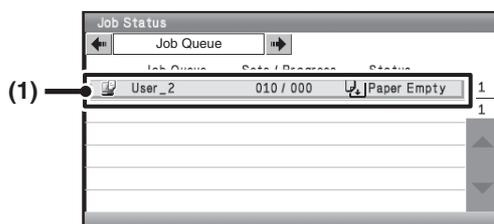
1	*JOB STATUS*	**Press the [JOB STATUS] key.**
2	(1) (2)	**Display details on the print job for which there is no paper.** (1) **Select the key of the job for which "Paper Empty" appeared.** (2) **Select the [Detail] key.**
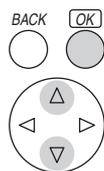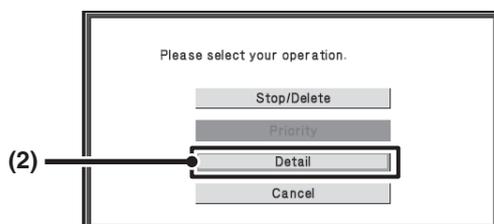
3
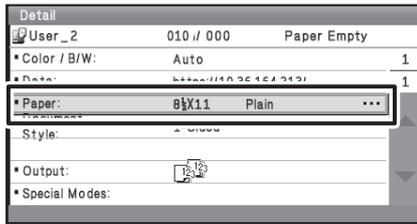
Select the [Paper] key.

4
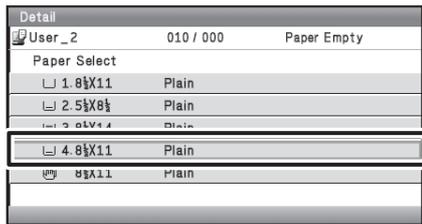
Select the key of the tray that has the paper you wish to use.

Printing begins.

If you changed to a different paper size, printing may not take place correctly; for example part of the text or image may run off the paper.

RETRIEVING AND USING A FILE FROM THE JOB STATUS SCREEN

Files stored selecting other than "Hold Only" in "Retention Settings" can be manipulated from the job status complete screen.

Keys in the display can be selected with the arrow keys and the [OK] key.

1

JOB STATUS

Press the [JOB STATUS] key.

2
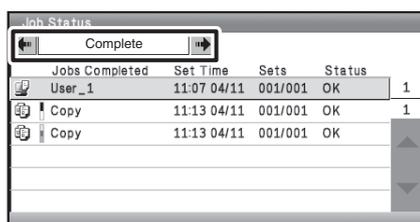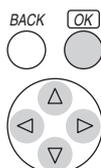
Change the print job status mode to [Complete].

Select either of the ◀ ▶ keys with the ◁ ▷ keys and press the [OK] key. The mode changes each time the [OK] key is pressed.

3

(1)

(2)
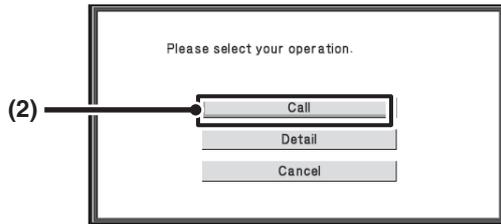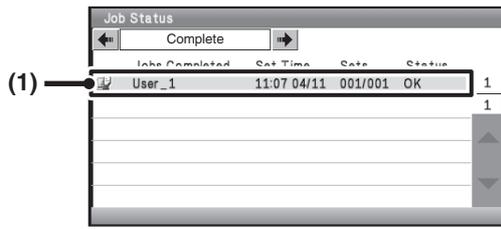
Select the desired file in the completed jobs.

(1) Select the key of the desired file.

(2) Select the [Call] key.

The job settings screen appears.
Select and perform the desired operation.
☞ PRINTING A STORED FILE (page 2-56)
☞ DELETING A STORED FILE (page 2-65)

To view information on a file, select the file and then select the [Detail] key.

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APPENDIX

PRINTER DRIVER SPECIFICATION LIST

Available functions and output results may vary depending on the type of printer driver being used.

Function			PCL6	PCL5c	PS	Windows PPD[1]	Macintosh PPD[1]
Frequently used functions	Copies		1-999	1-999	1-999	1-999	1-999
	Orientation		Yes	Yes	Yes	Yes	Yes
	N-Up	Number of pages	2,4,6,8,9,16	2,4,6,8,9,16	2,4,6,8,9,16	2,4,6,9,16[2,3]	2,4,6,9,16
		Order	Selectable	Selectable	Selectable	Selectable	Selectable
		Border	On/Off	On/Off	On/Off	Yes	Selectable
	2-Sided Print		Yes	Yes	Yes	Yes	Yes
	Fit To Page		Yes	Yes	Yes	No	Yes[4]
	Binding Edge		Selectable	Selectable	Selectable	No	Yes
	Black and White Print		Yes	Yes	Yes	Yes	Yes
	Staple[5]		Yes	Yes	Yes	Yes	Yes
Paper	Paper Size		Yes	Yes	Yes	Yes	Yes
	Custom Paper		8 size	8 size	8 size	Yes[2]	Yes
	Paper Selection		Yes	Yes	Yes	Yes	Yes
	Output tray		Yes	Yes	Yes	Yes	Yes
Convenient printer functions	Pamphlet		Yes	Yes	Yes	Yes	Yes
	Margin Shift		0 inch to 1.2 inch	0 inch to 1.2 inch	0 inch to 1.2 inch	Yes	Yes
	Poster Printing		Yes	No	Yes	No	No
	Rotate 180 degrees		Yes	Yes	Yes	Yes	Yes
	Zoom/XY-Zoom		Yes[6]	Yes[6]	Yes	Yes[6]	Yes[6]
	Line Width Settings		Yes	No	No	No	No
	Mirror Image		No	No	Yes	Yes	Yes[7]
Special functions	Different Paper		Yes	Yes	Yes	No	Yes[8,9]
	Transparency Inserts		Yes	Yes	Yes	No	Yes
	Carbon Copy		Yes	Yes	Yes	No	No
	Chapter Inserts		Yes	No	No	No	No
	Retention		Yes	Yes	Yes	No	Yes
Color mode adjusting function	Color Adjustment		Yes	Yes	Yes	No	Yes[10,11,12]
	Text To Black/ Vector To Black		Yes	Yes	Yes	No	No
	Advanced Color		Yes	Yes	Yes	Yes	Yes

Function		PCL6	PCL5c	PS	Windows PPD[1]	Macintosh PPD[1]
Functions to combine text and images	Watermark	Yes	Yes	Yes	Yes	Yes
	Image Stamp	Yes	No	Yes	No	No
	Overlay	Yes	Yes	Yes	No	No
Image Quality	Print Mode	Normal/ High Quality/ Fine	Normal/ High Quality	Normal/ High Quality/ Fine	Normal/ High Quality/ Fine	Normal/ High Quality/ Fine
	Graphics Mode Selection	Yes	Yes	No	No	No
	Toner Save[13]	Yes	Yes	Yes	Yes	Yes
Font	Resident font	80 fonts	80 fonts	136 fonts	136 fonts[14]	35 fonts
	Selectable download font	bitmap, TrueType, Graphics	bitmap, TrueType, Graphics	bitmap, TrueType, Type1	bitmap, TrueType, Type1	No[15]
Other functions	Auto Configuration	Yes	Yes	Yes	No	Yes[11]
	User Authentication	Yes	Yes	Yes	No	Yes

*1 The specifications of each function in Windows PPD and Macintosh PPD vary depending on the operating system version and the software application.
*2 Cannot be used in Windows NT 4.0.
*3 Only 2-Up and 4-Up printing can be used in Windows 98.
*4 Only Mac OS X v10.4.11, v10.5 to 10.5.8 and 10.6 can be used.
*5 Can be used when a finisher is installed.
*6 The horizontal and vertical proportion cannot be set separately.
*7 Only Mac OS 9.0 to 9.2.2 can be used.
*8 Only covers can be inserted.
*9 Cannot be used in Mac OS X v10.2.8 or v10.3.9.
*10 Cannot be used in Mac OS 9.0 to 9.2.2.
*11 Cannot be used in Mac OS X v10.2.8.
*12 Cannot be used in Mac OS X v10.5 to 10.5.8 and 10.6.
*13 This setting may not operate in some software applications and operating systems.
*14 The number of available resident fonts is 35 in Windows NT 4.0.
*15 True Type and Type1 can be selected in some versions of LaserWriter.

CHAPTER 3
SYSTEM SETTINGS

This chapter explains the system settings, which are used to configure a variety of parameters to suit the aims and needs of your workplace. The current selections that have been made for the settings can be viewed or printed out.
To quickly check where a setting is located in the system settings menu, see "System Settings Menu (Operation Panel)" (page 3-65) or "System Settings Menu (Web Page)" (page 3-66).

List of system settings on the operation panel
See "System Settings (General) List" (page 3-8) or "System Settings (Administrator) List" (page 3-20).

List of system settings in the Web page
See "System Settings (General) List" (page 3-31) or "System Settings (Administrator) List" (page 3-45).

For the procedures for using the display, see "USING THE OPERATION PANEL" (page 1-8) in "1. BEFORE USING THE MACHINE".
For the procedures for using the Web page, see "USING THE WEB PAGE" (page 1-12) in "1. BEFORE USING THE MACHINE".

SYSTEM SETTINGS

SYSTEM SETTINGS (GENERAL) ON THE OPERATION PANEL

SYSTEM SETTINGS (ADMINISTRATOR) ON THE OPERATION PANEL

SYSTEM SETTINGS (GENERAL) IN THE WEB PAGE

SYSTEM SETTINGS (ADMINISTRATOR) IN THE WEB PAGE

SYSTEM SETTINGS

System Settings

The system settings are used to configure a variety of parameters to suit the aims and needs of your workplace. The system settings are also used to display or print out the current settings and status of the machine. The system settings allow you to make the machine easier to use.

The system settings consist of settings that are used by general users, and settings that can only be configured by an administrator of the machine. These two groups of settings are distinguished in this manual as follows.

System Settings (General)	System Settings (Administrator) *Login Required
System settings that can be configured by general users (including the administrator). For example, the following settings can be configured: • Date and time settings • Paper tray settings (paper size and paper type) • Settings related to the printer function • Displaying the number of pages printed. For more information, see "SYSTEM SETTINGS (GENERAL) ON THE OPERATION PANEL" (page 3-7) and "SYSTEM SETTINGS (GENERAL) IN THE WEB PAGE" (page 3-31).	System settings that can be configured by the administrator. To configure these settings, login as an administrator is required. For example, the following settings can be configured: • Energy save settings • Settings related to the operation panel • Settings for peripheral devices installed on the machine. • Network connection settings For more information, see "SYSTEM SETTINGS (ADMINISTRATOR) ON THE OPERATION PANEL" (page 3-16) and "SYSTEM SETTINGS (ADMINISTRATOR) IN THE WEB PAGE" (page 3-44).
Settings for general users	Settings for administrators

> • **Administrator password**
>   To maintain security, the administrator of the machine should promptly change the password after the machine is purchased. (For the factory default administrator password, see "TO THE ADMINISTRATOR OF THE MACHINE" in the Safety Guide.) The password is changed in "Security Settings" in the Web page.
>   *To ensure a high level of security, change the password at regular intervals.
> • The above groupings of "General" and "Administrator" are used as a convenient means of clarifying the functions of the settings. These groupings do not appear in the display.

Configuring the System Settings

There are two ways to configure the system settings: using the machine's operation panel, and using the Web page that appears when the machine's Web server is accessed.
The Web page enables easy configuration of the settings from your computer via the network.
To configure the settings using the machine, see "Common Operation Methods" (page 3-5). To configure the settings using the Web page, see "Accessing the Web Server in the Machine" (page 3-6).
The settings are explained on the following pages of this manual:

System settings on the operation panel

- SYSTEM SETTINGS (GENERAL) ON THE OPERATION PANEL (page 3-7)
- SYSTEM SETTINGS (ADMINISTRATOR) ON THE OPERATION PANEL (page 3-16)

System settings in the Web page

- SYSTEM SETTINGS (GENERAL) IN THE WEB PAGE (page 3-31)
- SYSTEM SETTINGS (ADMINISTRATOR) IN THE WEB PAGE (page 3-44)

Common Operation Methods

This section explains special operation methods that are common to all system settings.
Be sure to read this section, as the information is omitted in the explanations of some of the individual settings.
For the procedures for using the display, see "USING THE OPERATION PANEL" (page 1-8) in "1. BEFORE USING THE MACHINE".

Example: Daylight Saving Time Setting (Default Settings) screen, Paper Type Registration (Paper Tray Settings) screen, and Energy Save screen
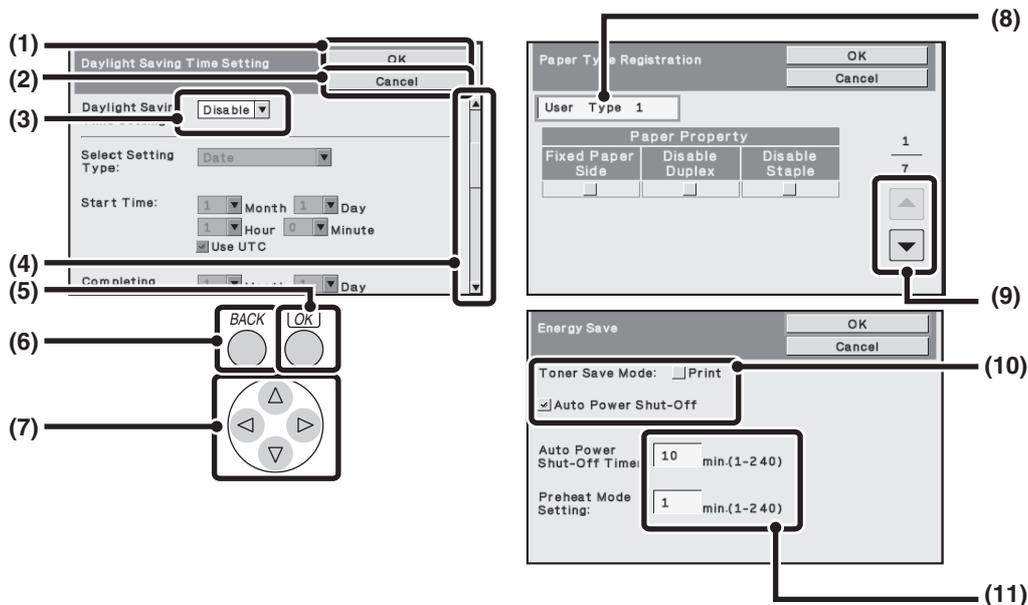
(1)   [OK] key (Display)

Select this key when you have finished configuring the settings in the displayed screen.

(2)   [Cancel] key

This key cancels a setting and returns you to the previous screen.

(3)   Select box

Select ▼ to display a list of the items that can be selected. Select an item in the list to select it.

(4)   Scroll bar

This bar shows the position of the current display in the whole screen.
You can move the screen up and down with the ▼ ▲ keys.

(5)   [OK] key (Operation panel)

When the selection frame is moved to a setting key and this key is pressed, the current setting is stored or the setting screen for that setting key appears. When the selection frame is moved to a checkbox or radio button, the checkbox or radio button will switch between ✔ and ☐ each time this key is pressed.

(6)   [Back] key

This key returns you to the previous screen.

(7)   Arrow keys

Press these keys to move the selection frame used to select settings and items in the display.

(8)   Text box

Select this box to open a text entry screen. When you have finished entering text in the screen, the text will appear in the text box.

(9)   ▼, ▲ keys

When settings extend over multiple screens, select the ▼ key or the ▲ key to switch through the screens.

(10)   Checkbox

This switches between ✔ and ☐ each time you select it. To enable the corresponding setting, select the checkbox so that a checkmark appears ✔. To disable the setting, clear the checkmark ☐.
Radio buttons (◉) are also used to select settings in this way. (However, radio buttons are used to select a single item out of several.)

(11)   Text box (numerical)

Select this box to enter a number. For the procedure for entering numbers, see "Entering numbers" (page 1-9) in "1. BEFORE USING THE MACHINE".

Accessing the Web Server in the Machine

When the machine is connected to a network, the machine's built-in Web server can be accessed from a Web browser on your computer.
For the procedures for using the display, see "USING THE WEB PAGE" (page 1-12) in "1. BEFORE USING THE MACHINE".

Opening the Web pages

This accesses the Web server in the machine and displays the Web page. The Web page can be used to configure the system settings.

1

(Example: When the machine's IP address is 192.168.1.28)
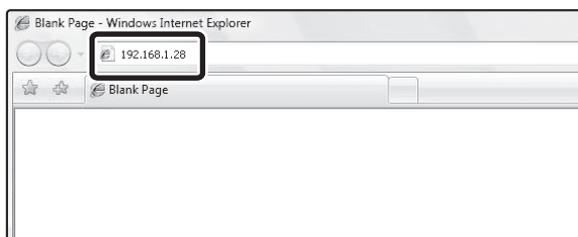
Start your Web browser and enter the IP address of the machine.

You must use a computer that is connected to the same network as the machine.
After the IP address is entered, the Web page will appear.

If user authentication is enabled, a login screen will appear after the IP address is entered. Enter your user name and password.

2
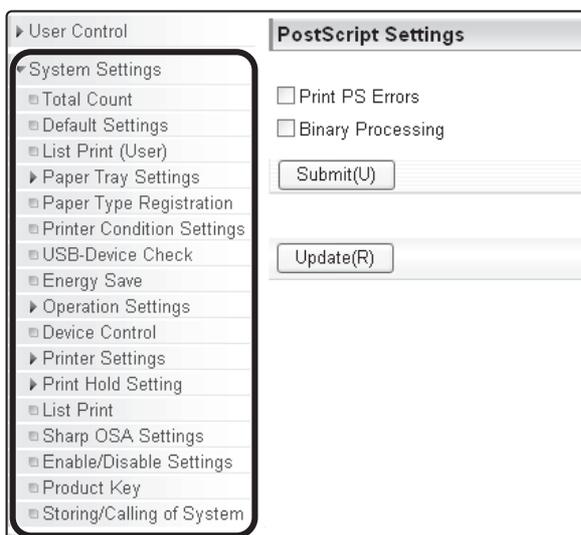
Click [System Settings] in the menu bar of the Web page and click the item that you wish to set.

When you have finished configuring the settings, click the [Submit] button.
To update the machine's setting information, click the [Update] button.

When you click an item, you may be prompted to enter your user name and password (or other information) for user authentication. In that case, enter your user information as appropriate.

Recommended Web browsers
• Internet Explorer: 6.0 or higher (Windows)
• Netscape Navigator: 9 (Windows)
• Firefox: 2.0 or higher (Windows)
• Safari: 1.5 or higher (Macintosh)

SYSTEM SETTINGS (GENERAL) ON THE OPERATION PANEL

This section explains system settings that can be configured on the operation panel by general users.

Accessing the System Settings (General)
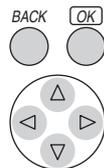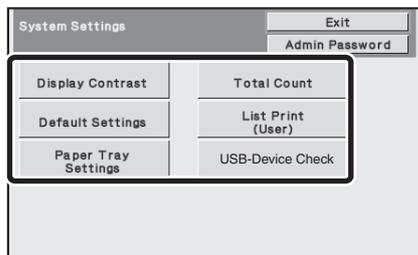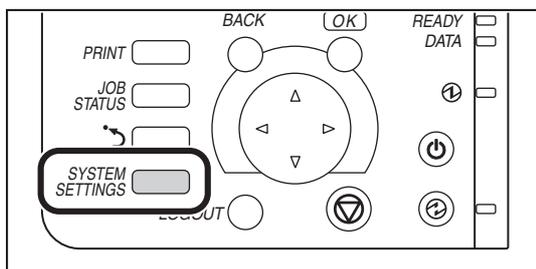
Make sure that the machine is in the standby state and then press the [SYSTEM SETTINGS] key on the operation panel.
When the [SYSTEM SETTINGS] key is pressed, the following menu screen appears on the display.

Use the arrow keys to select the desired item, press the [OK] key, and configure the settings.
For detailed explanations of each of the settings, see the following pages of this chapter.

> • To quit the system settings, select the [Exit] key in the top right corner of the screen.
>
> • For the procedure to follow when user authentication is enabled, see "USER AUTHENTICATION" (page 1-15) in "1. BEFORE USING THE MACHINE".

System Settings (General) List

When the system settings are accessed with general rights, the following items appear. For items that can only be accessed with administrator rights, see "System Settings (Administrator) List" (page 3-20).

✎ Depending on the machine specifications and peripheral devices installed, it may not be possible to use some settings.

Display Contrast

Item	Factory default setting	Page
■ **Display Contrast**		3-10

Total Count

Item	Factory default setting	Page
■ **Total Count**		3-10
● Job Count	–	3-10
● Device Count	–	3-10

Default Settings

Item	Factory default setting	Page
■ **Default Settings**		3-11
● Clock Adjust		
▶ Clock Adjust		
◆ Specify Time Zone	–	
◆ Date & Time Settings	–	3-11
◆ Synchronize with Internet Time Server	Disable	
▶ Daylight Saving Time Setting	Disable	
▶ Date Format	[MM/DD/YYYY], [/], [Last], [12 Hour]	
● Keyboard Select	English (US)	3-12

3-8

List Print (User)

Item	Factory default setting	Page
■ **List Print (User)**		3-12
● All Custom Setting List	–	
● Printer Test Page	–	

Paper Tray Settings

Item	Factory default setting	Page
■ **Paper Tray Settings**		3-13
● Tray Settings		
▶ Tray 1		
▶ Tray 2*	Plain, Auto-Inch	3-13
▶ Tray 3*		
▶ Tray 4*		
▶ Bypass		
◆ Select Similar Sizes for Auto Detection	8-1/2" x 14"	
● Paper Type Registration	–	3-15
● Auto Tray Switching	Enabled	3-15
● Custom Size Registration (Bypass)	Custom 1: X=11", Y=8-1/2" Custom 2: X=11", Y=8-1/2" Custom 3: X=11", Y=8-1/2"	3-15

* When a 500-sheet paper feed unit is installed.

USB-Device Check

Item	Factory default setting	Page
■ **USB-Device Check**	–	3-15

Display Contrast

Use this to set the contrast of the machine's display. Select the [Display Contrast] key.
In the screen that appears, select the [Lighter] key or the [Darker] key to adjust the contrast.

Total Count

This function shows the page count in each mode. Select the [Total Count] key.

Job Count

This displays or prints out the counts of all jobs.

> • Each sheet of paper used for automatic two-sided printing is counted as two pages.
> • Pages printed directly from the machine such as list prints are included in the "Other Prints" count.
> • The items displayed (or printed) will vary depending on the machine specifications and peripheral devices installed.

Device Count

This is used to display or print the counts of the peripheral devices installed on the machine.

> The items displayed (or printed) will vary depending on the machine specifications and peripheral devices installed.

Default Settings

The default settings for operation of the machine can be configured. Select the [Default Settings] key and select the settings.

Clock Adjust

Use this to set the date and time in the machine's built-in clock.
Set the time.

Item	Settings
Current Date	The current time set in the machine appears.
Specify Time Zone	If your region is ahead of GMT (Greenwich Mean Time), select [+]. If your region is behind GMT, select [-]. Next, specify the time difference between your region and GMT in hours and minutes.
Date & Time Settings	Select and set the year, month, day, hour, and minute.
Synchronize with Internet Time Server	This can be used when the machine is connected to the Internet. The machine's time is automatically adjusted to the time of an Internet time server.

Daylight Saving Time Setting

Enable daylight saving time.

Item	Settings
Daylight Saving Time Setting	Select whether or not the Daylight Saving Time Setting is enabled. If disabled, the following settings will not be possible.
Select Setting Type	Specify whether the starting and ending day of daylight saving time are to be set using the day of the week or the date.
Start Time	Set the starting time of daylight saving time. Set the starting month. If you selected "Day of the Week" in "Select Setting Type", set the starting week of daylight saving time and then the starting day. If you selected "Date" in "Select Setting Type", set the starting date. Set the hour and minute and the UTC (Coordinated Universal Time) setting.
Completing Time	Set the ending time of daylight saving time in the same way as you set the starting time.
Adjustment Time	Set the time that adjustment will take place when daylight saving time begins.

Date Format

The format used to print the date on lists and other output can be changed.

Item	Settings
Current Setting	The current time appears in the format set in the date format settings.
Format	Set the order of display of the year, month, and day (YYYY/MM/DD).
Separator	Select one of three symbols or a blank space for the separator used in the date.
Day-Name Position	Select whether the day name appears before or after the date.
Time Display	Select 12-hour format or 24-hour format for the time. 12-Hour Display: 12:00AM to 11:59AM/12:00PM to 11:59PM 24-Hour Display: 00:00 to 23:59

> ✎ If "Disabling of Clock Adjustment" (page 3-52) has been enabled in the system settings (administrator) in the Web page menu, the date and time cannot be set.

Keyboard Select

The layout of the keyboard that appears in text entry screens can be changed.
The keyboard layouts that can be selected are shown below.

English (US)	English (UK)	Japanese	French	German	Swedish
Norwegian	Finnish	Danish	Russian	Greek	Turkish

List Print (User)

Lists showing the settings and information stored in the machine can be printed. Select the [List Print (User)] key and select the settings.

List name	Description
All Custom Setting List	This list shows the hardware status, software status, printer condition settings, paper tray settings, and total counts.
Printer Test Page	This is used to print the PCL Symbol Set List, various font lists, and the NIC page (network interface settings, etc.). • PCL Symbol Set List • PCL Internal Font List • PCL Extended Font List • PS Font List • PS Extended Font List • NIC Page

• The items that appear will vary depending on the functions that have been added to the machine.
• If "Prohibit Test Page Printing" (page 3-58) has been enabled in the system settings (administrator) in the Web page menu, it will not be possible to print a test page.

Paper Tray Settings

Paper tray and paper type settings are explained in this section. Select the [Paper Tray Settings] key to configure the settings.

Tray Settings

These settings specify the paper type, paper size, and functions allowed for each paper tray.
When the [Tray Settings] key is selected, a list appears showing the trays and the current settings.
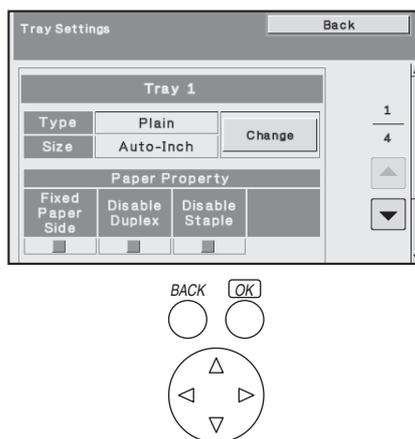
Settings of each tray

Select the [Change] key in the above screen to change the settings.
The following settings can be configured.

Item	Description
Type	Select the type of paper that is loaded in the tray. The paper types that can be selected vary by paper tray. For more information, see "Tray Settings" (page 3-14). To store a new paper type, see "Paper Type Registration" (page 3-15).
Size	Select the paper size from the list. The paper sizes that can be selected vary by tray. The sizes that can be selected may also be restricted by the paper type selected above. For more information, see "Tray Settings" (page 3-14). If the desired size does not appear in the list, select [Custom Size] and directly enter the size (only for the bypass tray). For more information, see "Tray Settings" (page 3-14).
Approving Feeding	Select whether or not printing is allowed using the specified tray.

✎ • If the paper size specified here is different from the size of paper that is loaded in a tray, a problem or misfeed may result when printing.
To change the paper size in a tray, see "1. BEFORE USING THE MACHINE".

• Paper properties such as "Fixed Paper Side" are automatically set when the paper type is selected. The paper tray properties cannot be changed in this screen.

• If "Disabling of Tray Settings" (page 3-54) has been enabled in the system settings (administrator) in the Web page menu, the tray settings (except for the bypass tray) cannot be configured.

3-13

Tray Settings

Paper Tray	Paper Type	Size
Tray 1	Plain, Pre-Printed, Recycled, Letter Head, Pre-Punched, Color, User Type	Auto-Inch (8-1/2" x 14", 8-1/2" x 11", 7-1/4" x 10-1/2", 5-1/2" x 8-1/2"), Auto-AB (A4, A5, B5, 216 mm x330 mm (8-1/2" x 13")), 216 mm x 343 mm (8-1/2" x 13-1/2"), 8-1/2" x 13-2/5" (216 mm x 340 mm), 16K
Tray 2*1		
Tray 3*1		Auto-Inch (8-1/2" x 14", 8-1/2" x 11", 7-1/4" x 10-1/2"), Auto-AB (A4, B5, 216 mm x 330 mm(8-1/2" x 13")), 216 mm x 343 mm (8-1/2" x 13-1/2"), 8-1/2" x 13-2/5" (216 mm x 340 mm), 16K
Tray 4*1		
Bypass	In addition to the paper types of trays 1 to 4, Heavy Paper*2, Thin Paper, Glossy Paper	Auto-Inch (8-1/2" x 14"*3, 8-1/2" x 13-2/5" (216 mm x 340 mm)*3, 8-1/2" x 11", 7-1/4" x 10-1/2", 5-1/2" x 8-1/2"), Auto-AB (A4, A5, B5, 216 mm x 330 mm (8-1/2" x 13")*3, 216 mm x 340 mm (8-1/2" x 13-2/5")*3, 216 mm x 343 mm (8-1/2" x 13-1/2")*3), Size Input-Inch (X=5-1/2" to 14", Y=5-1/2" to 8-1/2"), Size Input-AB (X=140 mm to 356 mm, Y=100 mm to 216 mm), 16K, Custom 1, Custom 2, Custom 3
	Labels	Auto-Inch (8-1/2" x 11"), Auto-AB (A4, B5)
	Transparency	Auto-Inch (8-1/2" x 11"), Auto-AB (A4)
	Envelope	Com-10, Monarch, DL, C5

*1 When a 500-sheet paper feed unit is installed.
*2 Heavy Paper : 28 lbs. bond to 110 lbs. index (106 g/m^2 to 209 g/m^2) heavy paper
*3 The size that is automatically detected is set in "Select Similar Sizes for Auto Detection" in the bypass tray settings screen (see below).

Select Similar Sizes for Auto Detection

"Select Similar Sizes for Auto Detection" in the bypass tray settings screen is used to select the paper size that is automatically detected from similar sizes when automatic paper size detection takes place.
Select one of two sizes when "Auto-Inch" is set. Select one of three sizes when "Auto-AB" is set.
When paper that is the same size as one of the paper sizes in the settings is placed in the bypass tray, the size that is selected in the settings will be automatically detected.

Auto-Inch	8-1/2" x 14", 8-1/2" x 13-2/5" (216 mm x 340 mm)
Auto-AB	216 mm x 330 mm (8-1/2" x 13"), 216 mm x 340 mm (8-1/2" x 13-2/5"), 216 mm x 343 mm (8-1/2" x 13-1/2")

Paper Type Registration

Store a paper type when the desired paper type does not appear as a selection or when you wish to create a new set of paper properties.
Up to 7 paper types can be stored.

Item	Description
Type Name	Store any name. The factory default names are "User Type 1" - "User Type 7".
Fixed Paper Side	Enable this setting when paper with a front and reverse side is used.
Disable Duplex	Enable this setting when paper is loaded that cannot be used for two-sided printing.
Disable Staple	Enable this setting when paper is used that cannot be stapled.

✎ The settings that can be selected vary depending on the peripheral devices installed.

Auto Tray Switching

When a tray runs out of paper during printing, this determines whether or not another tray with the same size and type of paper is automatically selected and printing continues.

Custom Size Registration (Bypass)

If you frequently use a special non-standard paper size in the bypass tray, you can store that paper size.
Storing the paper size saves you the trouble of setting the size each time you need to use it.
Up to three paper sizes can be stored.
Select the key ([Custom 1] to [Custom 3]) in which you wish to store or change a paper size.
Select whether you wish to enter the size in inches ("Size Input-Inch") or mm ("Size Input-AB"), and then set the X and Y dimensions of the paper.

"Size Input-Inch"
The X dimension can be set to a value from 5-1/2" to 14". The factory default setting is 11".
The Y dimension can be set to a value from 5-1/2" to 8-1/2". The factory default setting is 8-1/2".
"Size Input-AB"
The X dimension can be set to a value from 140 mm to 356 mm. The factory default setting is 297 mm.
The Y dimension can be set to a value from 100 mm to 216 mm. The factory default setting is 210 mm.

USB-Device Check

This lets you check the connection when a USB device is connected to the machine. Select the [USB-Device Check] key to check the connection.

✎ The status of a USB device that is not compatible with the machine will not appear.

SYSTEM SETTINGS (ADMINISTRATOR) ON THE OPERATION PANEL

This section explains the system settings that are configured by the administrator of the machine.

Accessing the System Settings (Administrator)

To access the system settings (administrator), the administrator must log in as explained below.

When User Authentication is not Enabled

When "User Authentication" (Web page only) is not enabled, follow the procedure below to log in.

Keys in the display can be selected with the arrow keys and the [OK] key.

1
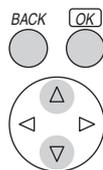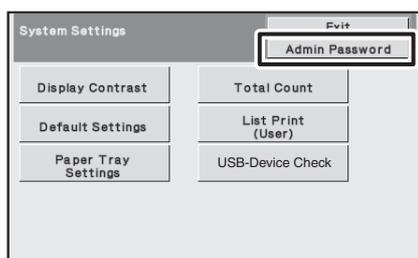
Select the [Admin Password] key.

2
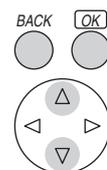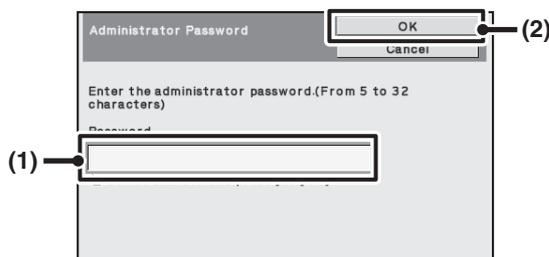
Log in.

(1) Select the [Password] text box and enter the administrator password.

Enter the administrator password in the administrator password entry screen.

(2) Select the [OK] key.

This completes the administrator login procedure. The system settings (administrator) can now be used.

- User authentication is initially disabled (factory default setting).
- **To logout...**
  Press the [LOGOUT] key.
  (If Auto Clear activates, logout will automatically take place.)

When User Authentication is Enabled

When "User Authentication" (Web page only) is enabled, follow the procedure below to log in.

✏ When auto login is enabled, the login screen will not appear.

When user authentication is by login name and password (and e-mail address)

✏ Administrator login is performed in the user selection screen. For more information on the login procedure when user authentication is enabled, see "USER AUTHENTICATION" (page 1-15) in "1. BEFORE USING THE MACHINE".

Keys in the display can be selected with the arrow keys and the [OK] key.

1

Select the [Login Name] key.

OPERATION PANEL (ADMINISTRATOR)

2

(1)

(2)

(3)
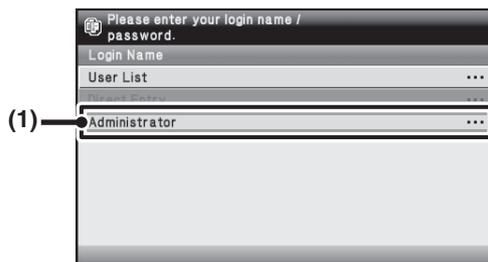
Log in.

(1) Select the [Administrator] key.

(2) Select the [Password] key.

Enter the administrator password in the administrator password entry screen.

(3) Select the [OK] key.

This completes the administrator login procedure. The system settings (administrator) can now be used.
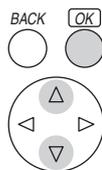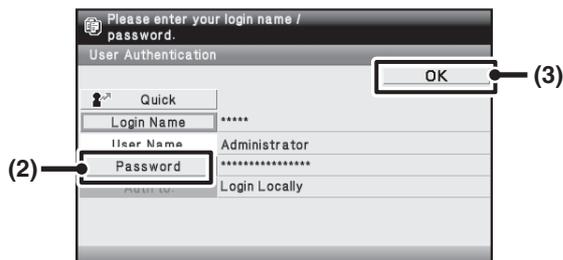
- If login name / password / e-mail address is selected for the authentication method, the [E-mail Address] key will appear below the "User Name".
- For the factory default administrator password, see "TO THE ADMINISTRATOR OF THE MACHINE" in the Safety Guide.
- This completes the administrator login procedure. The system settings (administrator) can now be used.

Login by user number

Keys in the display can be selected with the arrow keys and the [OK] key.
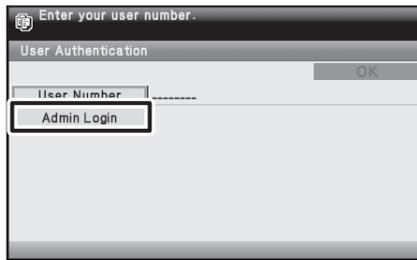
1		**Select the [Admin Login] key.**
2		**Log in.** **(1) Select the [Password] key.** Enter the administrator password in the administrator password entry screen. **(2) Select the [OK] key.** This completes the administrator login procedure. The system settings (administrator) can now be used.
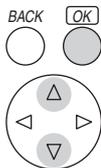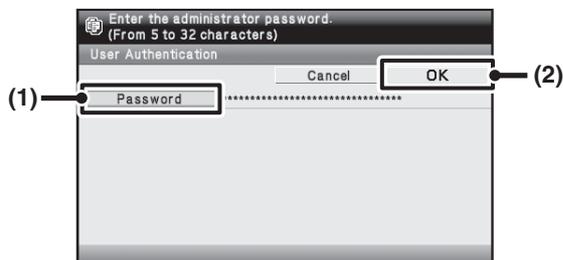
- In addition to login by selecting the [Admin Login] key, the system settings (administrator) can also be accessed when login is performed by selecting a user with administrator rights from the user list or by entering a user number with administrator rights. For more information on login procedures when user authentication is enabled, see "USER AUTHENTICATION" (page 1-15) in "1. BEFORE USING THE MACHINE".

- **To logout...**
  Press the [LOGOUT] key.
  (If Auto Clear activates, logout will automatically take place.)

System Settings (Administrator) List

The system settings that appear following administrator login are shown below. The default setting for each item is also shown.

> • Depending on the machine specifications and peripheral devices installed, it may not be possible to use some settings.
> • For information on the general settings, see "System Settings (General) List" (page 3-8).

Energy save

Item	Factory default setting	Page
■ **Energy Save**		3-23
● Toner Save Mode		3-23
▶ Print	Disabled	
● Auto Power Shut-Off	Enabled	3-23
● Auto Power Shut-Off Timer	15 min.	3-23
● Preheat Mode Setting	1 min.	3-23

Operation Settings

Item	Factory default setting	Page
■ **Operation Settings**		3-24
● Other Settings		3-24
▶ Keys Touch Sound	Middle	3-24
▶ Display Language Setting	American English	3-24
● Machine Display Pattern Setting	Pattern 1	3-24

Device Control

Item	Factory default setting	Page
■ **Device Control**		3-24
● Other Settings		3-24
▶ Registration Adjustment	–	3-24
▶ Optimization of a Hard Disk	–	3-24

Network Settings

Item	Factory default setting	Page
■ **Network Settings**		3-25
● IPv4 Settings	DHCP	3-25
● IPv6 Settings	Disabled	3-25
● Enable TCP/IP	Enabled	3-25
● Enable NetWare	Enabled	3-25
● Enable EtherTalk	Enabled	3-25
● Enable NetBEUI	Enabled	3-25
● Reset the NIC	–	3-25
● Ping Command	–	3-25

List Print (Administrator)

Item	Factory default setting	Page
■ **List Print (Administrator)**		3-26
● User Information Print	–	3-26

Security Settings

Item	Factory default setting	Page
■ **Security Settings**		3-27
● SSL Settings		
▶ Server Port		
◆ HTTPS	Enabled	
◆ IPP-SSL	Disabled	
◆ Redirect HTTP to HTTPS in Device Web Page Access	Disabled	
▶ Client Port		3-27
◆ HTTPS	Enabled	
◆ FTPS	Enabled	
◆ SMTP-SSL	Enabled	
◆ POP3-SSL	Enabled	
◆ LDAP-SSL	Enabled	
◆ Level of Encryption	Low	
● IPsec Settings	Disabled	3-27
● IEEE802.1X Setting	Disabled	3-27

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Product Key

Item	Factory default setting	Page
■ **Product Key***		3-28
● Serial Number	–	3-28
● E-mail Alert and Status	–	3-28
● XPS Expansion Kit	–	3-28

* It may not be possible to use some settings, depending on the peripheral devices installed.

Storing/Calling of System Settings

Item	Factory default setting	Page
■ **Storing/Calling of System Settings**		3-29
● Restore Factory Defaults	–	3-29
● Store Current Configuration	–	3-29
● Restore Configuration	–	3-29

Sharp OSA Settings

Item	Factory default setting	Page
■ **Sharp OSA Settings**		3-30
● External Account Setting		
▶ External Account Control	Disabled	3-30
▶ Enable Authentication by External Server	Disabled	
● USB Driver Settings		
▶ External Keyboard	Internal driver	
▶ USB Memory	Internal driver	3-30
▶ Level of Encryption	None	
● Animation Play Speed Setting	Standard	3-30

3-22

Energy Save

The Energy Save settings help reduce power costs. From an environmental perspective, these settings also help reduce pollution and conserve natural resources. Select the [Energy Save] key to configure the settings.

Toner Save Mode

You can reduce the amount of toner used for printing.

| Print data | A | → | Print example when "Toner Save Mode" is enabled | A |

> [Print] in Toner Save Mode is only effective when the machine's printer driver is not used. When the printer driver is used, the printer driver setting takes precedence.
> This function may not operate in some applications and operating systems.

Auto Power Shut-Off

This setting enables or disables Auto Power Shut-Off. Remove the checkmark if you prefer that Auto Power Shut-Off does not operate.
When the set duration of time elapses after printing ends, Auto Power Shut-Off activates and causes the machine to go on standby at a minimal level of power consumption.
This function reduces your power costs, and at the same time helps conserve natural resources and reduce pollution.
If you prefer that auto power shut-off activates as little as possible, it is recommended that you try lengthening the time setting after which activation takes place rather than disabling the function altogether. (The time setting is changed using "Auto Power Shut-Off Timer" below.)

Auto Power Shut-Off Timer

The time until Auto Power Shut-Off activates can be set to any number of minutes from 1 to 240.
Select the time that best suits your workplace needs.

> The timer setting will not be effective if Auto Power Shut-Off is disabled using "Auto Power Shut-Off".

Preheat Mode Setting

The time until Preheat Mode activates can be set to any number of minutes from 1 to 240.
Preheat Mode will activate when the set duration of time elapses after printing ends and no further operations are performed. This function reduces your power costs, and at the same time helps conserve natural resources and reduce pollution.
Select the time that best suits the needs of your workplace.

> Preheat mode cannot be disabled.

Operation Settings

Settings related to machine operation can be configured. Select the [Operation Settings] key to configure the settings.

Other Settings

Keys Touch Sound

This setting is used to adjust (or turn off) the volume of the beep that sounds when you select a key.

Display Language Setting

The language that appears in the display can be changed.

> When user authentication is enabled and a display language is specified in the favorite operation group, that setting is given priority.

Machine Display Pattern Setting

One of the six color patterns can be selected for the color pattern in the display.
A sample of the selected pattern can be viewed.

Device Control

These settings control devices installed on the machine. Select the [Device Control] key to configure the settings.

Other Settings

Registration Adjustment

If the colors are out of place on the printed surface when color printing is performed, the print positions of the colors can be adjusted.
To perform this adjustment, select the [Auto Adjustment] key. A message will appear. select the [Execute] key.

Optimization of a Hard Disk

This function optimizes the hard drive of the machine by defragmenting data. If a job is in progress, a message will appear and optimization will not begin until the job is finished. During optimization, the following operations are not possible:
• Web page access, reception of print data
• Use of keys on the operation panel
• Turning off the power with the main power switch of the machine.
• Auto Power Shut-Off
When optimization is completed, the machine will automatically restart.

> When the print hold (retention) function is frequently used and output of files seems somewhat slow, optimizing the hard drive may improve performance.

Network Settings

Network settings are described below. Select the [Network Settings] key to configure the settings.

✎ When settings are changed, the changes will take effect after the machine is restarted. To restart the machine see "TURNING THE POWER ON AND OFF" (page 1-13) in "1. BEFORE USING THE MACHINE ".

IPv4 Settings

When using the machine on a TCP/IP (IPv4) network, use this setting to configure the IP address of the machine. The settings are shown below.

IP Address
Enter the IP address of the machine.

IP Subnet Mask
Enter the IP Subnet Mask.

IP Gateway
Enter the IP Gateway address.

DHCP
Use this setting to have the IP address obtained automatically using DHCP (Dynamic Host Configuration Protocol). When this setting is enabled, it is not necessary to manually enter an IP address.

✎ • If the machine will be used on a TCP/IP network, be sure to enable "Enable TCP/IP" below.
• If DHCP is used, the IP address assigned to the machine may change automatically. If the IP address changes, specify the printer port setting again and then print.

IPv6 Settings

When using the machine on a TCP/IP (IPv6) network, use this setting to configure the IP address of the machine. The settings are shown below.

Enable IPv6 Protocol
Enable this setting.

DHCPv6
Use this setting to have the IP address obtained automatically using DHCP (Dynamic Host Configuration Protocol). When this setting is enabled, it is not necessary to manually enter an IP address.

Manual Address
Enter the IP address of the machine.

Prefix Length
Enter the prefix length (0 to 128).

Default Gateway
Enter the IP Gateway address.

✎ • If the machine will be used on a TCP/IP network, be sure to enable "Enable TCP/IP" below.
• If DHCP is used, the IP address assigned to the machine may change automatically. If the IP address changes, specify the printer port setting again and then print.
• In an IPv6 environment, the machine can use LPD or IPP protocol.

Enable TCP/IP

To use the machine on a TCP/IP network, this setting must be enabled.

Enable NetWare

To use the machine on a NetWare network, this setting must be enabled.

Enable EtherTalk

To use the machine on an EtherTalk network, this setting must be enabled.

Enable NetBEUI

To use the machine on a NetBEUI network, this setting must be enabled.

Reset the NIC

This returns all "Network Settings" to the factory default settings.

Ping Command

Use this function to check if the machine can communicate with a computer on the network. Specify the IP address of the desired computer and select the [Execute] key.

3-25

List Print (Administrator)

This is used to print lists and reports that are only for use by the administrator of the machine. Select the [List Print (Administrator)] key to configure the settings.

User Information Print

User lists, usage count lists, usage limit group lists, and other lists related to user control can be printed.
- User List
- List of Number of Pages Used
- Page Limit Group List
- Authority Group List
- Favorite Operation Group List
- All User Information Print

3-26

Security Settings

The following settings are related to security. Select the [Security Settings] key to configure the settings.

SSL Settings

SSL can be used for data transmission over a network. SSL is a protocol that enables the encryption of information communicated over a network. Encrypting data makes it possible to transmit and receive sensitive information safely.
SSL can be enabled for the following protocols:

Server Port
- HTTPS: Apply SSL encryption to HTTP communication.
- IPP-SSL: Apply SSL encryption to IPP communication.
- Redirect HTTP to HTTPS in Device Web Page Access:
  When this setting is enabled, all communication that attempts to access the machine by HTTP is redirected to HTTPS.

Client Port
- HTTPS: Apply SSL encryption to HTTP communication.
- FTPS: Apply SSL encryption to FTP communication.
- SMTP-SSL: Apply SSL encryption to SMTP communication.
- POP3-SSL: Apply SSL encryption to POP3 communication.
- LDAP-SSL: Apply SSL encryption to LDAP communication.

Level of Encryption
The encryption strength can be set to one of three levels.

IPsec Settings

IPsec can be used for data transmission/reception on a network. When IPsec is used, data can be sent and received safely without the need to configure settings for IP packet encryption in a Web browser or other higher-level application.
This setting is only used to enable or disable IPsec; detailed IPsec settings are configured in the Web pages. Some Web page settings may not allow connection to the machine, or the settings may not allow printing or Web page display. In this case, deselect this setting and change the Web page settings.

> Advanced IPsec settings are configured by clicking [Security Settings] and then [IPsec Settings] in the Web page menu.

IEEE802.1X Setting

IEEE802.1X can be used to authenticate a user to allow use of the machine.
IEEE802.1X protocol defines port-based authentication for both wired and wireless networks.
Use IEEE802.1X authentication to allow only authenticated devices to use network, and protect against network abuse by third parties.
This setting is only used to enable or disable IEEE802.1X; detailed IEEE802.1X settings are configured in the Web pages.
Some Web page settings may not allow connection to the machine, or the settings may not allow printing or Web page display. In this case, deselect this setting and change the Web page settings.

> Advanced IEEE802.1X settings are configured by clicking [Security Settings] and then [IEEE802.1X Settings] in the Web page menu.

Product Key

The procedures for entering the product keys of the expansion kits are explained below. Select the [Product Key] key to configure the settings.

> • It may not be possible to use some settings, depending on the peripheral devices installed.
>
> • For the product key to be entered, contact your dealer.

Serial Number

This displays the serial number that is required to obtain the product key.

E-mail Alert and Status

Enter the product key of e-mail alert and status.

XPS Expansion Kit

Enter the product key of the XPS expansion kit.

Storing/Calling of System Settings

The current system settings can be stored, previously stored system settings can be retrieved, and the factory default system settings can be restored. Select the [Storing/Calling of System Settings] key to configure the settings.

Restore Factory Defaults

This is used to return the system settings to the factory default settings. If you wish to create a record of the current settings before restoring the factory default settings, print the current settings using "Security Settings" (page 3-27) in the system settings (administrator).

> When settings are changed, the changes will take effect after the machine is restarted. To restart the machine see "TURNING THE POWER ON AND OFF" (page 1-13) in "1. BEFORE USING THE MACHINE ".

Store Current Configuration

This is used to store the currently configured system settings. The stored settings will be retained even if the [POWER] key ( ) is turned off. To retrieve the stored settings, use "Restore Configuration" below.

Items not stored
- Network Settings: These are not stored as unexpected settings may cause damage to the network.
- Product Keys: Product Keys are not stored as reissue of keys may be necessary.

Restore Configuration

Use this to restore settings stored with "Store Current Configuration".
The current settings will change to the retrieved settings.

Sharp OSA Settings

External Account Setting

External Account Control
When this setting is enabled, the machine enters external totaling mode and the totaling function can be used via an external account application.

Enable Authentication by External Server
When this setting is enabled, the machine enters external authentication mode. Access to the machine is controlled by an external application.

> When settings are changed, the changes will take effect after the machine is restarted. To restart the machine see "TURNING THE POWER ON AND OFF" (page 1-13) in "1. BEFORE USING THE MACHINE ".

USB Driver Settings

Configure the settings below based on the specifications of your Sharp OSA application.

External Keyboard
Select whether the internal or external driver for the external keyboard is used.

USB Memory
Select whether the internal or external USB memory driver is used.

Level of Encryption
Select the level of encryption for communication using the external driver.
Select from none or AES-128, AES-256.

> • When the external driver is selected, it will not be possible to use a USB device in a mode other than Sharp OSA mode.
> • When settings are changed, the changes will take effect after the machine is restarted. To restart the machine see "TURNING THE POWER ON AND OFF" (page 1-13) in "1. BEFORE USING THE MACHINE ".

Animation Play Speed Setting

Set the playing speed of the animation in the Sharp OSA application.
The following settings can be configured.
• Standard
• High

> When "High" is selected, the machine's job processing speed (for print and other jobs) may become slower. If you wish to give priority to job processing speed, select "Standard". Note that this setting ("High" or "Standard") does not change the animation playing speed when the machine is not processing a print job.

SYSTEM SETTINGS (GENERAL) IN THE WEB PAGE

This section explains system settings that can be configured in the Web page by general users. These settings are accessed by selecting [System Settings] in the Web page menu bar.

System Settings (General) List

When the system settings are accessed with general rights, the following items appear. For items that can only be accessed with administrator rights, see "System Settings (Administrator) List" (page 3-45).

✎ • Depending on the machine specifications and peripheral devices installed, it may not be possible to use some settings.
• After configuring certain settings, you may be prompted to restart the machine. Restart the machine in the screen that appears.

Total Count

Item	Factory default setting	Page
■ **Total Count**		3-34
● Job Count	–	3-34
● Device Count	–	3-34

Default Settings

Item	Factory default setting	Page
■ **Default Settings**		3-35
● Clock Adjust		
▶ Clock Adjust		
◆ Specify Time Zone	–	
◆ Date & Time Settings	–	3-35
◆ Synchronize with Internet Time Server	Disable	
▶ Daylight Saving Time Setting	Disable	
▶ Date Format	[MM/DD/YYYY], [/], [Last], [12 Hour]	
● Keyboard Select	English (US)	3-36

List Print (User)

Item	Factory default setting	Page
■ **List Print (User)**		3-36
● All Custom Setting List	–	
● Printer Test Page	–	

Paper Tray Settings

Item	Factory default setting	Page
■ **Paper Tray Settings**		3-37
● **Auto Tray Switching**	Enabled	3-37
● **Tray Settings**		3-37
▶ Tray 1	Plain, Auto-Inch	
▶ Tray 2*		
▶ Tray 3*		
▶ Tray 4*		
▶ Bypass		
◆ Select Similar Sizes for Auto Detection	8-1/2" x 14"	
● **Custom Size Registration (Bypass)**	Custom 1: X=11", Y=8-1/2" Custom 2: X=11", Y=8-1/2" Custom 3: X=11", Y=8-1/2"	3-37

* When a 500-sheet paper feed unit is installed.

Paper Type Registration

Item	Factory default setting	Page
■ **Paper Type Registration**	–	3-40

Printer Condition Settings

Item	Factory default setting	Page
■ **Printer Condition Settings**		3-41
● Printer Default Settings		3-41
▶ Copies	1	
▶ Orientation	Portrait	
▶ Default Paper Size	A4 (8-1/2" x 11")	
▶ Default Paper Type	Plain Paper	
▶ Initial Resolution Setting	600dpi (High Quality)	
▶ Disable Blank Page Print	Disabled	
▶ Line Thickness	5	
▶ 2-Sided Print	1-Sided	
▶ Color Mode	Auto	
▶ N-Up Print	1-Up	
▶ Fit To Page	Enabled	
▶ Output		
◆ Print per Unit	Enabled	
◆ Staple*	Disabled	
▶ Quick File	Disabled	
● PCL Settings		3-42
▶ PCL Symbol Set Setting	PC-8	
▶ PCL Font Setting	Internal Font, 0: Courier	
▶ PCL Line Feed Code	0.CR=CR; LF=LF; FF=FF	
▶ Wide A4	Disabled	
● PostScript Setting		3-43
▶ Print PS Errors	Disabled	
▶ Binary Processing	Disabled	

* When a finisher is installed.

USB-Device Check

Item	Factory default setting	Page
■ **USB-Device Check**	–	3-43

3-33

Total Count

This function shows the page count in each mode. Select [System Settings] - [Total Count] from the menu bar.

Job Count

This displays or prints out the counts of all jobs.

> • Each sheet of paper used for automatic two-sided printing is counted as two pages.
> • Pages printed directly from the machine such as list prints are included in the "Other Prints" count.
> • The items displayed (or printed) will vary depending on the machine specifications and peripheral devices installed.

Device Count

This is used to display or print the counts of the peripheral devices installed on the machine.

> The items displayed (or printed) will vary depending on the machine specifications and peripheral devices installed.

Default Settings

The default settings for operation of the machine can be configured. Select [System Settings] - [Default Settings] from the menu bar and configure each setting.

Clock Adjust

Use this to set the date and time in the machine's built-in clock.
Set the time.

Item	Settings
Current Date & Time	The current time set in the machine appears.
Specify Time Zone	If your region is ahead of GMT (Greenwich Mean Time), select [+]. If your region is behind GMT, select [-]. Next, specify the time difference between your region and GMT in hours and minutes.
Date & Time Settings	Select and set the year, month, day, hour, and minute.
Synchronize with Internet Time Server	This can be used when the machine is connected to the Internet. The machine's time is automatically adjusted to the time of an Internet time server.

Daylight Saving Time Setting

Enable daylight saving time.

Item	Settings
Daylight Saving Time Setting	Select whether or not the Daylight Saving Time Setting is enabled. If disabled, the following settings will not be possible.
Select Setting Type	Specify whether the starting and ending day of daylight saving time are to be set using the day of the week or the date.
Start Time	Set the starting time of daylight saving time. Set the starting month. If you selected "Day of the Week" in "Select Setting Type", set the starting week of daylight saving time and then the starting day. If you selected "Date" in "Select Setting Type", set the starting date. Set the hour and minute and the UTC (Coordinated Universal Time) setting.
Completing Time	Set the ending time of daylight saving time in the same way as you set the starting time.
Adjustment Time	Set the time that adjustment will take place when daylight saving time begins.

Date Format

The format used to print the date on lists and other output can be changed.

Item	Settings
Current Setting	The current time appears in the format set in the date format settings.
Format	Set the order of display of the year, month, and day (YYYY/MM/DD).
Separator	Select one of three symbols or a blank space for the separator used in the date.
Day-Name Position	Select whether the day name appears before or after the date.
Time Display	Select 12-hour format or 24-hour format for the time. 12-Hour Display: 12:00AM to 11:59AM/12:00 to 11:59PM 24-Hour Display: 00:00 to 23:59

> ✎ If "Disabling of Clock Adjustment" (page 3-52) has been enabled in the system settings (administrator), the date and time cannot be set.

Keyboard Select

The layout of the keyboard that appears in text entry screens can be changed.
The keyboard layouts that can be selected are shown below.

English (US)	English (UK)	Japanese	French	German	Swedish
Norwegian	Finnish	Danish	Russian	Greek	Turkish

List Print (User)

Lists showing the settings and information stored in the machine can be printed. Select [System Settings] - [List Print (User)] from the menu bar and configure each setting. To print a list, select the [Print] key that appears in each item.

List name	Description
All Custom Setting List	This list shows the hardware status, software status, printer condition settings, paper tray settings, and total counts.
Printer Test Page	This is used to print the PCL Symbol Set List, various font lists, and the NIC page (network interface settings, etc.). • PCL Symbol Set List • PCL Internal Font List • PCL Extended Font List • PS Font List • PS Extended Font List • NIC Page

> • The items that appear will vary depending on the functions that have been added to the machine.
> • If "Prohibit Test Page Printing" (page 3-58) has been enabled in the system settings (administrator), it will not be possible to print a test page.

Paper Tray Settings

Paper tray and paper type settings are explained in this section. Select [System Settings] - [Paper Tray Settings] from the menu bar and configure each setting.
A displayed tray name can be selected to open the tray settings screen.

Auto Tray Switching

When a tray runs out of paper during printing, this determines whether or not another tray with the same size and type of paper is automatically selected and printing continues.

Tray Settings

These settings specify the paper type, paper size, and functions allowed for each paper tray.

Settings of each tray

The following settings can be configured.

Item	Description
Type	Select the type of paper that is loaded in the tray. The paper types that can be selected vary by paper tray. For more information, see "Tray Settings" (page 3-39). To store a new paper type, see "Paper Type Registration" (page 3-40).
Size	Select the paper size from the list. The paper sizes that can be selected vary by tray. The sizes that can be selected may also be restricted by the paper type selected above. For more information, see "Tray Settings" (page 3-39). If the desired size does not appear in the list, select [Custom Size] and directly enter the size (only for the bypass tray). For more information, see "Tray Settings" (page 3-39).
Approving Feeding	Select whether or not printing is allowed using the specified tray.

> • If the paper size specified here is different from the size of paper that is loaded in a tray, a problem or misfeed may result when printing.
> To change the paper size in a tray, see "1. BEFORE USING THE MACHINE".
>
> • Paper properties such as "Fixed Paper Side" are automatically set when the paper type is selected. The paper tray properties cannot be changed in this screen.
>
> • If "Disabling of Tray Settings" (page 3-54) has been enabled in the system settings (administrator), the tray settings (except for the bypass tray) cannot be configured.

Tray Settings

Paper Tray	Paper Type	Size
Tray 1	Plain, Pre-Printed, Recycled, Letter Head, Pre-Punched, Color, User Type	Auto-Inch (8-1/2" x 14", 8-1/2" x 11", 7-1/4" x 10-1/2", 5-1/2" x 8-1/2"), Auto-AB (A4, A5, B5, 216 mm x330 mm (8-1/2" x 13")), 216 mm x 343 mm (8-1/2" x 13-1/2"), 8-1/2" x 13-2/5" (216 mm x 340 mm), 16K
Tray 2[1]		
Tray 3[1]		Auto-Inch (8-1/2" x 14", 8-1/2" x 11", 7-1/4" x 10-1/2"), Auto-AB (A4, B5, 216 mm x 330 mm(8-1/2" x 13")), 216 mm x 343 mm (8-1/2" x 13-1/2"), 8-1/2" x 13-2/5" (216 mm x 340 mm), 16K
Tray 4[1]		
Bypass	In addition to the paper types of trays 1 to 4, Heavy Paper[2], Thin Paper, Glossy Paper	Auto-Inch (8-1/2" x 14"[3], 8-1/2" x 13-2/5" (216 mm x 340 mm)[3], 8-1/2" x 11", 7-1/4" x 10-1/2", 5-1/2" x 8-1/2"), Auto-AB (A4, A5, B5, 216 mm x 330 mm (8-1/2" x 13")[3], 216 mm x 340 mm (8-1/2" x 13-2/5")[3], 216 mm x 343 mm (8-1/2" x 13-1/2")[3]), Size Input-Inch (X=5-1/2" to 14", Y=5-1/2" to 8-1/2"), Size Input-AB (X=140 mm to 356 mm, Y=100 mm to 216 mm), 16K, Custom 1, Custom 2, Custom 3
	Labels	Auto-Inch (8-1/2" x 11"), Auto-AB (A4, B5)
	Transparency	Auto-Inch (8-1/2" x 11"), Auto-AB (A4)
	Envelope	Com-10, Monarch, DL, C5

[1] When a 500-sheet paper feed unit is installed.

[2] Heavy Paper : 28 lbs. bond to 110 lbs. index (106 g/m^2 to 209 g/m^2) heavy paper

[3] The size that is automatically detected is set in "Select Similar Sizes for Auto Detection" in the bypass tray settings screen (see below).

Select Similar Sizes for Auto Detection

"Select Similar Sizes for Auto Detection" in the bypass tray settings screen is used to select the paper size that is automatically detected from similar sizes when automatic paper size detection takes place.
Select one of two sizes when "Auto-Inch" is set. Select one of three sizes when "Auto-AB" is set.
When paper that is the same size as one of the paper sizes in the settings is placed in the bypass tray, the size that is selected in the settings will be automatically detected.

Auto-Inch	8-1/2" x 14", 8-1/2" x 13-2/5" (216 mm x 340 mm)
Auto-AB	216 mm x 330 mm (8-1/2" x 13"), 216 mm x 340 mm (8-1/2" x 13-2/5"), 216 mm x 343 mm (8-1/2" x 13-1/2")

Custom Size Registration (Bypass)

If you frequently use a special non-standard paper size in the bypass tray, you can store that paper size.
Storing the paper size saves you the trouble of setting the size each time you need to use it.
Up to three paper sizes can be stored.
Select whether you wish to enter the size in inches ("Size Input-Inch") or mm ("Size Input-AB"), and then set the X and Y dimensions of the paper.

"Size Input-Inch"
The X dimension can be set to a value from 5-1/2" to 14". The factory default setting is 11".
The Y dimension can be set to a value from 5-1/2" to 8-1/2". The factory default setting is 8-1/2".
"Size Input-AB"
The X dimension can be set to a value from 140 mm to 356 mm. The factory default setting is 297 mm.
The Y dimension can be set to a value from 100 mm to 216 mm. The factory default setting is 210 mm.

Paper Type Registration

Store a paper type when the desired paper type does not appear as a selection or when you wish to create a new set of paper properties.
Select [System Settings] - [Paper Type Registration] from the menu bar and configure each setting.
Up to 7 paper types can be stored.

Item	Description
Type Name	Store any name. The factory default names are "User Type 1" - "User Type 7".
Fixed Paper Side	Enable this setting when paper with a front and reverse side is used.
Disable Duplex	Enable this setting when paper is loaded that cannot be used for two-sided printing.
Disable Staple	Enable this setting when paper is used that cannot be stapled.

📝 The settings that can be selected vary depending on the peripheral devices installed.

Printer Condition Settings

The Printer Condition Settings are used to configure basic printer settings and settings for printing from a DOS application. Select [System Settings] - [Printer Condition Settings] from the menu bar and configure each setting.

Printer Default Settings

The default settings are used to set advanced print conditions for printing in an environment where the print driver is not used (such as printing from MS-DOS or from a computer that does not have the provided print driver installed).

> ✎ When printing using the printer driver, the printer driver settings take precedence over the printer condition settings.

Settings

Item	Selections
Copies	1 - 999 sets
Orientation	• Portrait • Horizontal
Default Paper Size	8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11", 7-1/4" x 10-1/2", 5-1/2" x 8-1/2", A4, B5, A5, 16k
Default Paper Type	Plain Paper, Letter Head, Pre-Printed, Pre-Punched, Recycle Paper, Color
Initial Resolution Setting	• 600 dpi • 600 dpi (High Quality) • 1200 dpi
Disable Blank Page Print	• ☐ (Disabled) • ☑ (Enabled)
Line Thickness[*1]	0-9
2-Sided Print	• 1-Sided • 2-Sided (Book) • 2-Sided (Tablet)
Color Mode	• Auto • Black & White
N-Up Print[*2]	• 1-Up • 2-Up • 4-Up
Fit To Page[*3]	• ☑ (Use Fit to Page) • ☐ (Do not use Fit to Page)

Item		Selections
Output	Print per unit	• ☑ (Use Print per Unit) • ☐ (Do not use Print per Unit)
	Staple*4	• ☑ (Use Staple) • ☐ (Do not use Staple)
Quick File		• ☐ (Disabled) • ☑ (Enabled)

*1 This setting is used to adjust the line width of vector graphics (black & white printing only). Except for CAD and other specialized uses, there is normally no need to change this setting. When "0" is selected, all lines are printed at a width of 1 dot.
*2 Paper sizes that can be used with this function are 8-1/2" x 14", 8-1/2" x 11", and A4. (This function may not take effect with some print methods.)
*3 Only effective when printing PDF, JPEG, and TIFF files.
*4 When a finisher is installed.

PCL Settings

To configure the symbol set, fonts, line break codes, and other settings used in a PCL environment, click the [PCL Settings] tab.

Settings

Item	Description	Selections
PCL Symbol Set Setting	Specify the symbol set used for printing.	Select from 35 items.
PCL Font Setting	Use this to select the font used for printing.	• Internal Font • Extended Font (List of internal fonts when extended fonts are not installed.)
PCL Line Feed Code	This setting is used to select how the printer responds when a line feed command is received.	• 0.CR=CR; LF=LF; FF=FF • 1.CR=CR+LF; LF=LF;FF=FF • 2.CR=CR; LF=CR+LF; FF=CR+FF • 3.CR=CR+LF; LF=CR+LF; FF=CR+FF
Wide A4	When this is enabled, 80 characters per line can be printed on A4 size paper using a 10-pitch font. (When this setting is disabled, up to 78 characters can be printed per line.)	• ☑ (Enabled) • ☐ (Disabled)

PostScript Setting

To configure settings for printing an error description when a PostScript data print error occurs and settings for reception of PostScript data in binary format, click the [PostScript Setting] tab.

Settings

Item	Description	Selections
Print PS Error	When a PS (PostScript) error occurs during PostScript printing, this setting determines whether or not an error notice is printed.	• ☑ (Enabled) • ☐ (Disabled)
Binary Processing	Receive PostScript data in binary format.	• ☑ (Enabled) • ☐ (Disabled)

USB-Device Check

This lets you check the connection when a USB device is connected to the machine. Select [System Settings] - [USB-Device Check] from the menu bar, and check the USB device.

✎ The status of a USB device that is not compatible with the machine will not appear.

SYSTEM SETTINGS (ADMINISTRATOR) IN THE WEB PAGE

This section explains system settings that can be configured in the Web page by an administrator. These settings are accessed by selecting [System Settings] in the Web page menu bar.

Accessing the System Settings (Administrator)

To access the system settings (administrator), the administrator must log in as explained below.

When User Authentication is not Enabled

Click [Login] or click an item that requires administrator authority.
A login screen will appear. Enter the administrator password.

When User Authentication is Enabled

Log in using one of the methods below. Note that a login screen will not appear when auto login user is enabled.

When user authentication is by login name and password (and e-mail address)

When accessing the Web page, enter a login name and password with administrator authority in the login screen. If the login method has been set to login name / password / e-mail address, a text box for your [E-mail Address] will appear. Enter your e-mail address in the text box.

Login by user number

When accessing the Web page, enter a user number with administrator authority in the login screen.
Login by administrator password is also possible from [Administrator Login].

- User authentication is initially disabled (factory default setting).
- Before logging in, it is recommended that you enable the SSL function in your Web browser to prevent the password from being leaked onto the network.
- **To logout...**
  Click the [Logout] key in the top right corner of the screen. You can also close your Web browser.

System Settings (Administrator) List

The system settings that appear following administrator login are shown below. The default setting for each item is also shown.

✎ • Depending on the machine specifications and peripheral devices installed, it may not be possible to use some settings.
• For information on the general settings, see "System Settings (General) List" (page 3-8).
• After configuring certain settings, you may be prompted to restart the machine. Restart the machine in the screen that appears.

Energy save

Item	Factory default setting	Page
■ **Energy Save**		3-51
● Toner Save Mode		3-51
▶ Print	Disabled	
● Auto Power Shut-Off	Enabled	3-51
● Auto Power Shut-Off Timer	15 min.	3-51
● Preheat Mode Setting	1 min.	3-51

Operation Settings

Item	Factory default setting	Page
■ **Operation Settings**		3-52
▶ Keys Touch Sound	Middle	3-52
▶ Auto Clear Setting	60 sec.	3-52
◆ Cancel Auto Clear Timer	Disabled	
▶ Message Time Setting	6 sec.	3-52
▶ Machine Display Language Setting	American English	3-52
▶ Disabling of Job Priority Operation	Disabled	3-52
▶ Disabling of Bypass Printing	Disabled	3-52
▶ Key Operation Setting	0.0 sec.	3-52
◆ Disable Auto Key Repeat	Disabled	
▶ Disabling of Clock Adjustment	Disabled	3-52
▶ Machine Display Pattern Setting	Pattern 1	3-52

Item	Factory default setting	Page
● Remote Operation Settings		
▶ Remote Software Operation		
◆ Operational Authority	Prohibited	
◆ View Password Entry Screen	Display in Both PC and Machine	
▶ Operation from Specified PC		3-53
◆ Operational Authority	Prohibited	
◆ Hostname or IP Address of PC	–	
◆ View Password Entry Screen	Display in Both PC and Machine	
▶ Operation by User who Has Password		
◆ Operational Authority	Prohibited	
◆ View Password Entry Screen	Display in Both PC and Machine	
● Soft Keyboard Template Setting	1: .com, 2: .net, 3: .org, 4: .biz, 5: .info, 6: http://, 7 to 30: Not set	3-53

Device Control

Item	Factory default setting	Page
■ **Device Control**		3-54
● Disabling of Duplex	Disabled	3-54
● Disabling of Optional Paper Feed Unit[*1]	Disabled	3-54
● Disabling of Tray Settings	Disabled	3-54
● Disabling of Offset[*2]	Disabled	3-54
● Disabling of Stapler[*2]	Disabled	3-54
● Disabling of Color Mode[*3]	Disabled	3-54
● Auto Paper Selection Setting	Plain Paper	3-54
● Fusing Control Settings	16 - 23 lbs. (60 - 89g/m^2)	3-54
● Color Adjustments		3-54
◆ Easy Calibration	–	3-55
◆ Color Balance	–	3-56

*1 When a 500-sheet paper feed unit is installed.
*2 When a finisher is installed.
*3 When a color-related problem has occurred.

Printer Settings

Item	Factory default setting	Page
■ **Printer Settings**		3-58
● Default Settings		3-58
▶ Prohibit Notice Page Printing	Enabled	3-58
▶ Prohibit Test Page Printing	Disabled	3-58
▶ A4/Letter Size Auto Change	Disabled	3-58
▶ Print Density Level		3-58
◆ Color	3	
◆ Black & White	3	
▶ CMYK Exposure Adjustment	0	3-58
▶ Bypass Tray Settings		3-58
◆ Enable Detected Paper Size in Bypass Tray	Disabled	3-58
◆ Enable Selected Paper Type in Bypass Tray	Enabled	3-58
◆ Exclude Bypass-Tray from Auto Paper Select	Disabled	3-58
▶ Job Spool Queuing	Enabled	3-58
● Interface Settings		3-59
▶ Hexadecimal Dump Mode	Disabled	3-59
▶ I/O Timeout	60 sec.	3-59
▶ Enable USB Port	Enabled	3-59
▶ USB Port Emulation Switching	Auto	3-59
▶ Enable Network Port	Enabled	3-59
▶ Network Port Emulation Switching	Auto	3-59
▶ Port Switching Method	Switch at End of Job	3-59

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Print Hold Setting

Item	Factory default setting	Page
■ **Print Hold Setting**		3-60
● Default Mode Settings	Sharing Mode	3-60
● Sort Method Setting	Date	3-60
● Administrator Authority Setting		3-60
▶ Delete File	Disabled	
▶ Change Password	Disabled	
● Batch Print Settings		3-60
▶ Selection of [All Users] is not allowed.	Enabled	
▶ Selection of [User Unknown] is not allowed.	Enabled	
● Automatic Deletion of File Settings	All invalid	3-60

List Print (Administrator)

Item	Factory default setting	Page
■ **List Print (Administrator)**		3-61
● Administrator Settings List	–	3-61
● Web Settings List*	–	3-61

* When network connection is enabled.

Sharp OSA Settings

Item	Factory default setting	Page
■ **Sharp OSA Settings**		3-61
● Animation Play Speed Setting	Standard	3-61

Enable/Disable Settings

Item	Factory default setting	Page
■ **Enable/Disable Settings**		3-62
● Printer Condition Settings		3-62
▶ Disable Blank Page Print	Disabled	3-62
● User Control		3-62
▶ Disabling of Printing by Invalid User	Disabled	3-62
▶ Disable Switching of Display Order	Disabled	3-62
● Operation Settings		3-62
▶ Cancel Auto Clear Timer	Disabled	3-62
▶ Disabling of Job Priority Operation	Disabled	3-62
▶ Disabling of Bypass Printing	Disabled	3-62
▶ Disable Auto Key Repeat	Disabled	3-62
▶ Disabling of Clock Adjustment	Disabled	3-62
● Device Control		3-62
▶ Disabling of Duplex	Disabled	3-62
▶ Disabling of Optional Paper Feed Unit[*1]	Disabled	3-62
▶ Disabling of Tray Setting	Disabled	3-62
▶ Disabling of Offset[*2]	Disabled	3-62
▶ Disabling of Stapler[*2]	Disabled	3-62
▶ Disabling of Color Mode[*3]	Disabled	3-62
● Printer Settings		3-63
▶ Prohibit Notice Page Printing	Enabled	3-63
▶ Prohibit Test Page Printing	Disabled	3-63
▶ Exclude Bypass-Tray from Auto Paper Select	Disabled	3-63
● Print Hold Setting		3-63
▶ Batch Print Settings		3-63
◆ Selection of [All Users] is not allowed.	Enabled	
◆ Selection of [User Unknown] is not allowed.	Enabled	

*1 When a 500-sheet paper feed unit is installed.
*2 When a finisher is installed.
*3 When a color-related problem has occurred.

Product Key

Item	Factory default setting	Page
■ **Product Key***		3-63
● Serial Number	–	3-63
● E-mail Alert and Status	–	3-63
● XPS Expansion Kit	–	3-63

* It may not be possible to use some settings, depending on the peripheral devices installed.

Storing/Calling of System Settings

Item	Factory default setting	Page
■ **Storing/Calling of System Settings**		3-64
● Restore Factory Defaults	–	3-64
● Store Current Configuration	–	3-64
● Restore Configuration	–	3-64

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Energy Save

The Energy Save settings help reduce power costs. From an environmental perspective, these settings also help reduce pollution and conserve natural resources. Select [System Settings] - [Energy Save] from the menu bar and configure each setting.

Toner Save Mode

You can reduce the amount of toner used for printing.

Print data **A** ➡ Print example when "Toner Save Mode" is enabled **A**

> ✎ [Print] in Toner Save Mode is only effective when the machine's printer driver is not used. When the printer driver is used, the printer driver setting takes precedence.
> This function may not operate in some applications and operating systems.

Auto Power Shut-Off

This setting enables or disables Auto Power Shut-Off. Remove the checkmark if you prefer that Auto Power Shut-Off does not operate.
When the set duration of time elapses after printing ends, Auto Power Shut-Off activates and causes the machine to go on standby at a minimal level of power consumption.
This function reduces your power costs, and at the same time helps conserve natural resources and reduce pollution.
If you prefer that auto power shut-off activates as little as possible, it is recommended that you try lengthening the time setting after which activation takes place rather than disabling the function altogether. (The time setting is changed using "Auto Power Shut-Off Timer" below.)

Auto Power Shut-Off Timer

The time until Auto Power Shut-Off activates can be set to any number of minutes from 1 to 240.
Select the time that best suits your workplace needs.

> ✎ The timer setting will not be effective if Auto Power Shut-Off is disabled using "Auto Power Shut-Off".

Preheat Mode Setting

The time until Preheat Mode activates can be set to any number of minutes from 1 to 240.
Preheat Mode will activate when the set duration of time elapses after printing ends and no further operations are performed. This function reduces your power costs, and at the same time helps conserve natural resources and reduce pollution.
Select the time that best suits the needs of your workplace.

> ✎ Preheat mode cannot be disabled.

Operation Settings

Settings related to machine operation can be configured. Select [System Settings] - [Operation Settings] from the menu bar and configure each setting.

Keys Touch Sound

This setting is used to adjust (or turn off) the volume of the beep that sounds when you select a key.

Auto Clear Setting

The time until Auto Clear activates can be set to any number of minutes from 10 to 240.
If the machine is not used for the duration of time set here, the auto clear function will clear any settings that have been selected and return the screen to the base screen of the job status screen.

Cancel Auto Clear Timer
This is used to disable the auto clear function.

Message Time Setting

The duration of time that messages appear in the display (the time until a message is automatically cleared) can be set to any number of seconds from 1 to 12.

Machine Display Language Setting

The language that appears in the display can be changed.

> ✎ When user authentication is enabled and a display language is specified in the favorite operation group, that setting is given priority.

Disabling of Job Priority Operation

This disables the job priority function and hides the [Priority] key in the job status screen.

Disabling of Bypass Printing

This is used to disable bypass printing (printing other jobs ahead of a job that has been stopped* because the paper required for the job is not in any of the trays).
* This does not include cases where the paper ran out during the job.

Key Operation Setting

This setting determines how long a key in the display must be selected until the key input is registered. The time can be set from 0 to 2 seconds in increments of 0.5 seconds.
By lengthening the time setting, key input can be prevented when a key is selected accidentally. Keep in mind, however, that when a longer setting is selected more care is required when selecting keys to ensure that key input is registered.

Disable Auto Key Repeat
This is used to disable key repeat.
Key repeat causes a setting to change continuously while a key is selected, not only each time the key is selected.

Disabling of Clock Adjustment

This setting is used to prohibit changing of the date and time.

Machine Display Pattern Setting

One of the six color patterns can be selected for the color pattern in the display.
A sample of the selected pattern can be viewed.

Remote Operation Settings

Configure settings required for remote operation of the machine from a computer connected to the same network.

Remote Software Operation

Operational Authority	This is used when remote software is used to operate the machine remotely.
View Password Entry Screen	When remote software is used to operate the machine remotely, the entry screen for the various passwords entered on the machine (such as login passwords) can be displayed on the machine, your computer, or both. This setting can be used to prevent the password from being seen.

Operation from Specified PC

Operational Authority	This is used to allow remote operation of the machine using a specified computer.
Hostname or IP Address of PC	Enter the host name or IP address of the computer that will connect to the machine. A maximum of 127 characters can be entered.
View Password Entry Screen	When a specified computer is used to operate the machine remotely, the entry screen for the various passwords entered on the machine (such as login passwords) can be displayed on the machine, your computer, or both. This setting can be used to prevent the password from being seen.

Operation by User who Has Password

Operational Authority	This is used to allow a user who has a password to operate the machine.
View Password Entry Screen	When a user who has a password operates the machine remotely, the entry screen for the various passwords entered on the machine (such as login passwords) can be displayed on the machine, your computer, or both. This setting can be used to prevent the password from being seen.

Soft Keyboard Template Setting

Use this to add a word to or edit a word in the list of stored words of the keyboard that appears in text entry screens.
Up to 30 words can be stored.
Select [System Settings] - [Operation Settings] - [Soft Keyboard Template Setting] in the menu bar, and configure the settings.

Device Control

These settings control devices installed on the machine. Select [System Settings] - [Device Control] from the menu bar and configure each setting.

Disabling of Duplex

This is used to disable two-sided printing, such as when the duplex module malfunctions.

Disabling of Optional Paper Feed Unit
(When a 500-sheet paper feed unit is installed.)

This setting is used to disable a 500-sheet paper feed unit, such as when it malfunctions.

Disabling of Tray Settings

This setting is used to prohibit tray settings (except for the bypass tray).

Disabling of Offset
(When a finisher is installed.)

This setting is used to disable the offset function.

Disabling of Stapler
(When a finisher is installed.)

This setting is used to prohibit stapling, such as when the stapler unit of the finisher malfunctions.

Disabling of Color Mode
(When a color-related problem has occurred.)

When a color-related problem has occurred and printing is not possible, the use of color mode can be temporarily prohibited. Black & white printing will still be allowed.

> This function is only for use as an emergency measure. Once this setting is enabled, only a service technician can cancel the setting. Promptly contact your dealer or nearest SHARP Service Department to have a service technician cancel the setting and resolve the color-related problem.

Auto Paper Selection Setting

The paper types* that the Auto Paper Selection function will select can be specified. Select one of the following settings:
- Plain Paper
- Plain and Recycle Paper
- Recycle Paper

The Auto Paper Selection function will not select any paper types other than the paper types specified with this setting.

* The paper type set for each paper tray using "Paper Tray Settings" (page 3-13) in the system settings (general).

Fusing Control Settings

These are used to control the toner fusing temperature according to the weight of the paper.
These settings apply to plain paper, recycled paper, punched paper, pre-printed paper, letterhead paper, colored paper, and user type paper.
You can select "16 to 23 lbs." or "23+ to 28 lbs." ("60g/m^2 to 89g/m^2" or "90g/m^2 to 105g/m^2").

> - Be sure to use only paper that is in the same weight range as the weight range set here. Do not mix plain or other paper that is outside the range with the paper in the tray.
> - When settings are changed, the changes will take effect after the machine is restarted. To restart the machine see "TURNING THE POWER ON AND OFF" (page 1-13) in "1. BEFORE USING THE MACHINE ".

Color Adjustments

Depending on the machine usage conditions and ambient environment, color drift may occur. In this event, print a test page from the machine and adjust the color balance.

This is used to perform color adjustments when the color print output appears to contain the incorrect colors throughout the document.

Environmental conditions for color adjustments
Color Adjustments are affected by the ambient lighting and the paper used to print the test page. Adjust the color balance under the conditions below.

- **Ambient light**
  White light or the same light as the ambient environment in which the machine is installed
- **Paper used to Test Print**
  Make sure to load 8-1/2" x 11" or A4 white plain paper for color printing in the machine.
  Color reproduction may vary depending on the paper quality. Do not use paper that has absorbed moisture.

Easy Calibration and Color Balance

The machine has the two color adjustment functions below. Use the function that is appropriate for the severity of the color drift.

- **Easy Calibration**
  Use when color drift is comparatively mild.
- **Color Balance**
  Use when color drift is severe, or when the Easy Calibration did not correct the color drift.

> ⚠ Colors printed by the machine and colors displayed on your computer monitor will never completely match due to differences in the color formation method.

Easy Calibration

This function is performed by selecting the desired color of gray (processed gray), which is a combination of cyan, magenta, and yellow on the printed test page. Before using the Easy Calibration, load 8-1/2" x 11" or A4 white plain paper in the tray and follow the instructions in "Environmental conditions for color adjustments".

(1) Access the machine's Web page from your computer and open the Color Adjustments page.

(2) Click the [Test Print] button in the Easy Calibration.

A test page for the Easy Calibration is printed.

(3) View the test page from directly in front, and select the cell that is closest to the neutral gray.

Place five sheets of white plain paper under the printed test page so that no background color or pattern shows through the test page.
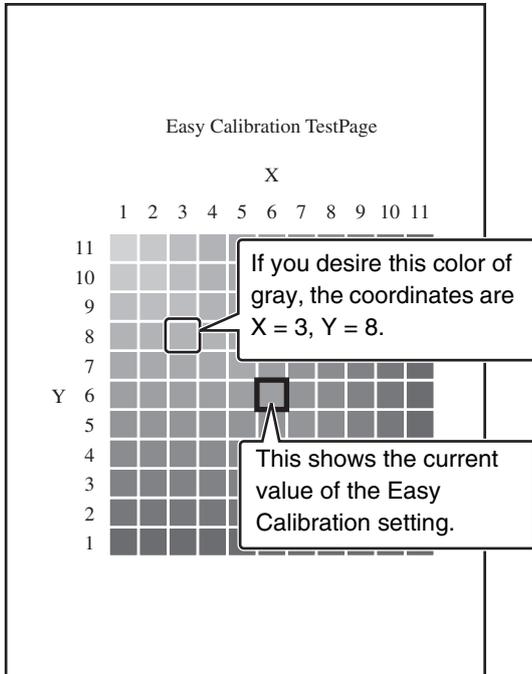
The test page is divided into cells with 11 on the horizontal axis (X) and 11 on the vertical axis (Y). Each cell is filled in with gray mixed with a varied hue of color.

(4) Enter the coordinates of the color selected in step (3) in [X] and [Y] of the Easy Calibration and click the [Submit] button.
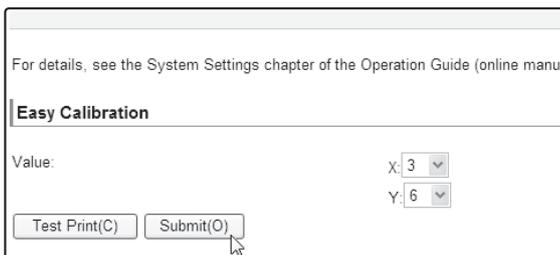
If the color adjustment is not satisfactory on the trial print, repeat the above procedure (1) to (4). If the color is still not satisfactory after repeating the procedure several times, use the "Color Balance".

Color Balance

This function is used to adjust each of the density levels (low, mid, and high) of the four color components, cyan, magenta, yellow and black.
Use this mode when the color deviation is significant.
Before using the Color Balance, load 8-1/2" x 11" or A4 white plain paper in the tray and follow the instructions in "Environmental conditions for color adjustments" (page 3-55).

(1) Access the machine's Web page from your computer and open the Color Adjustments page.

(2) Click the [Test Print] button in the Color Balance.

A test page for the Color Balance is printed.
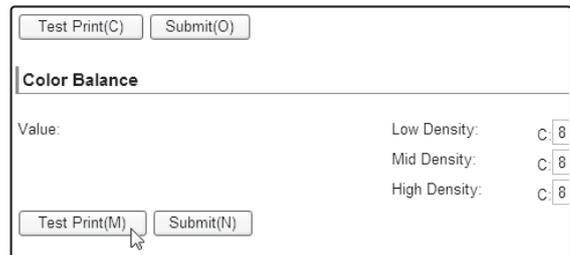
(3) Place the color chart that accompanies the machine on the test page.

Place five sheets of white plain paper under the printed test page so that no background color or pattern shows through the test page.

Color chart

Test page
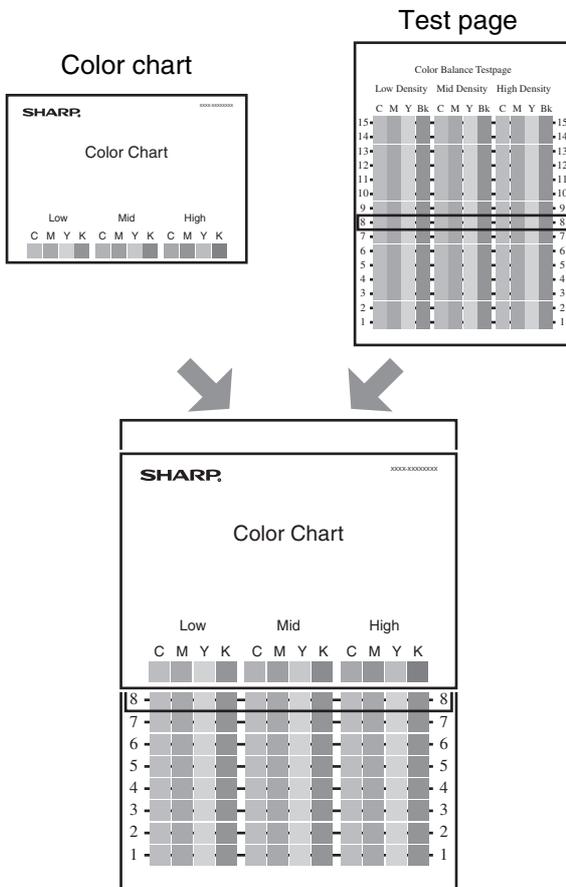
Color Chart

Do not let the color chart that accompanies the machine become dirty, and take care not to misplace the color chart. If you misplace the color chart, contact your dealer or nearest SHARP Service Department.

(4) Move the color chart vertically to select the similar colors to the color chart.

Compare the test page to the color chart from directly in front. To select the colors, follow the steps below.

1 From column C of "Low Density" on the test page, select the similar color as the cyan in "Low" on the color chart.
When you find the similar color, record the line number indicated at left and right.

2 Repeat step 1 for magenta, yellow, and black.
Record the respective line numbers on the test page of M (magenta), Y (yellow), and Bk (black).

3 Repeat steps 1 and 2 to select and record the line numbers of the colors on the test page that are similar to the cyan, magenta, yellow, and black in "Mid" and "High" on the color chart.
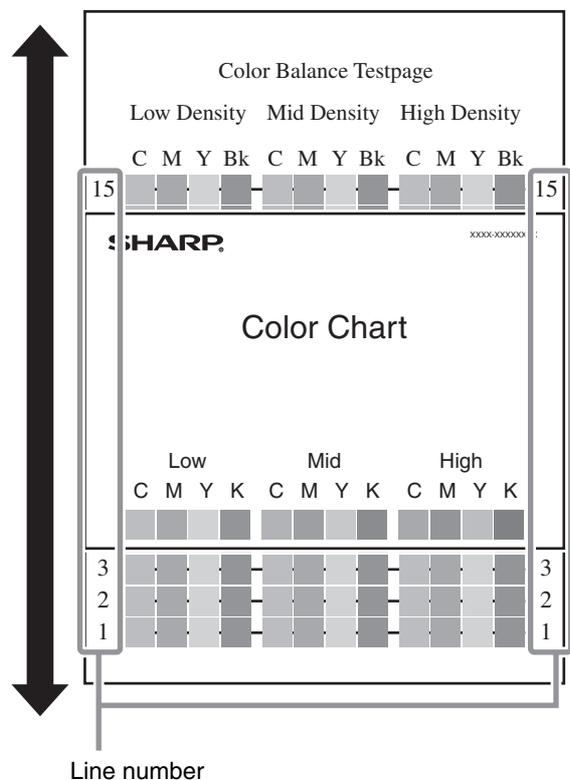
Line number

(5) Enter the line numbers recorded in step 4 in the C, M, Y, and Bk boxes of "Low Density", "Mid Density", and "High Density" in the Color Balance and click the [Submit] button.
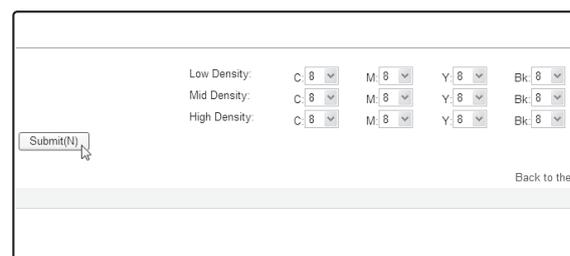
If the color adjustment is not satisfactory on the trial print, repeat the above procedure (1) to (5).

Printer Settings

Settings related to the printer function can be configured

Default Settings

Printer condition settings are described below. Select [System Settings] - [Printer Settings] - [Default Settings] in the menu bar, and configure the settings.

Prohibit Notice Page Printing

This setting is used to disable printing of notice pages. A notice page is printed when printing cannot be executed as specified due to insufficient memory or other reason. The notice page indicates the reason.

Prohibit Test Page Printing

This setting is used to disable printing of test pages. When this setting is enabled, "Printer Test Page" in the system settings cannot be used to print test pages.

A4/Letter Size Auto Change

When printing an A4 size image, this setting allows letter (8-1/2 x 11") size paper to be used if A4 size paper is not loaded.

Print Density Level

This lightens or darkens the print density of color and black and white images. The print density can be adjusted to five levels.

CMYK Exposure Adjustment

This is used to adjust the density of cyan (C), magenta (M), Yellow (Y), and Black (K). The density of each color can be adjusted to 17 levels.

Bypass Tray Settings

Enable Detected Paper Size in Bypass Tray
This is used to prohibit printing when the paper size specified for a print job is different from the paper size inserted in the bypass tray.

Enable Selected Paper Type in Bypass Tray
This is used to prohibit printing when the paper type specified for a print job is different from the paper type inserted in the bypass tray.

Exclude Bypass-Tray from Auto Paper Select
When [auto] is selected for paper type selection, the bypass tray can be excluded from the trays that can be selected. This is recommended when special media is often placed in the bypass tray.

Job Spool Queuing

When this function is enabled, received print jobs are displayed in the spool queue of the job status screen. The jobs are moved to the job queue after they have been analyzed by the machine. Multiple jobs that have not yet been analyzed can appear in the spool queue. When this function is disabled, received print jobs are displayed in the job queue without being displayed in the spool queue. However, when an encrypted PDF job is printed, the job appears in the spool queue.

Interface Settings

These settings are used to control and monitor data transmitted to the USB port or network port of the machine.
Select [System Settings] - [Printer Settings] - [Interface Settings] in the menu bar, and configure the settings.

Hexadecimal Dump Mode

This function is used to print the print data from a computer in hexadecimal format together with the corresponding ASCII text. This allows you to check whether or not print data from the computer is being transmitted to the machine correctly.

Example of a hexadecimal dump

```
1B  40  00  00  00  00  00  00   00  00  00  00  00  00  00  0 . @ . . . . . . . . . . . . . . . . . . .
0                                                             0 1 2 3 4 5 6 7 8 9 A B C D E F
30  31  32  33  34  35  36  37   38  39  41  42  43  44  45  4  G H I J K L M . . . . . . . . .
6
47  48  49  4A  4B  4C  4D  0D   0A  00  00  00  00  00  00  0
0
00  00  00  00  00  00  00  00   00  00  00  00  00  00  00  0
0
                                     .
```

I/O Timeout

The I/O timeout can be set to any number of seconds from 1 to 999.
The I/O timeout function temporarily breaks the connection if the set duration of time elapses without any data being received by the port. After the connection is broken, the port is set to auto selection or the next print job is begun.

Enable USB Port

This is used to enable printing from the USB port.

USB Port Emulation Switching

If the machine is connected using the USB port, select the emulated printer language.
The settings are shown below.
 • Auto
 • PostScript
 • PCL

> • The settings are the same as those of "Network Port Emulation Switching".
> • Unless printer errors occur frequently, it is recommended that you use the factory default setting "Auto".

Enable Network Port

This is used to enable printing from the network port.

Network Port Emulation Switching

This setting is used to select the emulated printer language when the machine is connected by a network port.
The settings are shown below.
 • Auto
 • PostScript
 • PCL

> • The settings are the same as those of "USB Port Emulation Switching".
> • Unless printer errors occur frequently, it is recommended that you use the factory default setting "Auto".

Port Switching Method

This setting is used to select when port switching takes place.

Switch at End of Job
The port changes to auto selection when printing ends.

Switch after I/O Timeout
When the time set in "I/O Timeout" elapses, the port changes to auto selection.

> The following two print ports are available on the machine:
> • USB port
> • Network port

Print Hold Setting

Settings for Print Hold (Retention) can be configured. Select [System Settings] - [Print Hold Setting] from the menu bar and configure each setting.

Default Mode Settings

This is used to specify which mode, Sharing or Confidential, is used as the default mode when storing a file.
When [Confidential Mode] is selected, the [Confidential] checkbox in the information screen for filing will be selected ☑ .

Sort Method Setting

This setting is used to select the order in which of files stored in the Main Folder are displayed. Select one of the following settings:
• File Name
• User Name
• Date

Administrator Authority Setting

For files and user folders that have a password, this setting allows the administrator password to be entered instead of the password when accessing the file or folder.
The administrator can also change the password.

Batch Print Settings

When printing files by batch printing, this setting is used to prohibit the selection of the [All Users] key and the [User Unknown] key in the user selection screen.

Automatic Deletion of File Settings

Time setting can be configured to have files (stored by print hold (retention)) automatically deleted at a specified time.
Up to 3 settings can be stored to be automatically deleted.
The procedure for using this function is as follows:

(1) Select one of [Setting 1] to [Setting 3].
(2) Set the time and date of automatic deletion.
(3) Specify whether or not protected files and confidential files are to be deleted, and then click the [Submit] button.
(4) Enable the stored settings, and then click the [Submit] button.

Item	Description
Schedule	Select the automatic deletion cycle. • Every Day: Auto deletion every day at the specified time. • Every Week: Auto deletion at the specified time on the specified day of the week. • Every Month: Auto deletion at the specified time on the specified day of the month.
Delete Protected File	Enable this setting to include protected files in the deletion.
Delete Confidential File	Enable this setting to include confidential files in the deletion.

Delete Now
Print Hold (Retention) data will be deleted immediately, regardless of the date and time setting.

List Print (Administrator)

This is used to print lists and reports that are only for use by the administrator of the machine. Select [System Settings] - [List Print (Administrator)] from the menu bar and configure each setting.

Administrator Settings List

Lists of the administrator settings for the following modes can be printed.
• Print
• Print Hold
• Security
• Common
• All Administrator Settings List

Web Settings List
(When network connection is enabled.)

This prints a list of the settings that are configured in the Web pages.

Sharp OSA Settings

Select [System Settings] - [Sharp OSA Settings] from the menu bar and configure each setting.

Animation Play Speed Setting

Set the playing speed of the animation in the Sharp OSA application.
The following settings can be configured.
• Standard
• High

> ✎ When "High" is selected, the machine's job processing speed (for print and other jobs) may become slower. If you wish to give priority to job processing speed, select "Standard". Note that this setting ("High" or "Standard") does not change the animation playing speed when the machine is not processing a print job.

Enable/Disable Settings

The following settings are used to prohibit the use of certain functions. Select [System Settings] - [Enable/Disable Settings] from the menu bar and configure each setting.

The Enable/Disable Settings control the same parameters as the enable/disable settings in other settings. The settings are linked together (changing one setting changes the other).

Printer Condition Settings

Disable Blank Page Print
This setting is used to disable blank page printing.

User Control

Disabling of Printing by Invalid User
Printing by users whose information is not stored in the machine, such as printing without entering valid user information in the printer driver or printing of a file on an FTP server from the Web pages, can be prohibited.

Disable Switching of Display Order
This is used to prohibit changes to the order of display (search number order, ascending, descending) in the user list.
When this setting is enabled, selecting a tab on the user list screen does not change the order. The display order will remain fixed at the order that is in effect when this setting is enabled.

Operation Settings

Cancel Auto Clear Timer
This setting is used to disable Auto Clear.

Disabling of Job Priority Operation
The job priority function can be disabled. When this is done, the [Priority] key will not appear in the job status screen.

Disabling of Bypass Printing
This setting is used to disable bypass printing (printing other jobs ahead of a job that has been stopped* because the paper required for the job is not in any of the trays).
* This does not include cases where the paper ran out during the job.

Disable Auto Key Repeat
This setting is used to disable the auto key repeat function.

Disabling of Clock Adjustment
This setting is used to prohibit changing of the date and time.

Device Control

Disabling of Duplex
This is used to disable two-sided printing, such as when the duplex module malfunctions.

Disabling of Optional Paper Feed Unit
(When a 500-sheet paper feed unit is installed.)
This setting is used to disable a 500-sheet paper feed unit, such as when it malfunctions.

Disabling of Tray Setting
This setting is used to prohibit tray settings.

Disabling of Offset
(When a finisher is installed.)
This setting is used to disable the offset function.

Disabling of Stapler
(When a finisher is installed.)
This setting is used to prohibit stapling, such as when the stapler unit of the finisher malfunctions.

Disabling of Color Mode
(When a color-related problem has occurred.)
When a color-related problem has occurred and printing is not possible, the use of color mode can be temporarily prohibited. Black & white printing will still be allowed.

This function is only for use as an emergency measure. Once this setting is enabled, only a service technician can cancel the setting. Promptly contact your dealer or nearest SHARP Service Department to have a service technician cancel the setting and resolve the color-related problem.

Printer Settings

Prohibit Notice Page Printing
This setting is used to disable printing of notice pages.

Prohibit Test Page Printing
This setting is used to disable printing of test pages. When this setting is enabled, "Printer Test Page" in the system settings cannot be used to print test pages.

Exclude Bypass-Tray from Auto Paper Select
When [Auto] is selected for paper type selection, the bypass tray can be excluded from the trays that can be selected. This is recommended when special paper is often placed in the bypass tray.

Print Hold Setting

Batch Print Settings
When printing files by batch printing, this setting is used to prohibit the selection of the [All Users] key and the [User Unknown] key in the user selection screen.

Product Key

The procedures for entering the product keys of the expansion kits are explained below. Select [System Settings] - [Product Key] from the menu bar and configure each setting.

✎ • It may not be possible to use some settings, depending on the peripheral devices installed.
  • For the product key to be entered, contact your dealer.

Serial Number

This displays the serial number that is required to obtain the product key.

E-mail Alert and Status

Enter the product key of e-mail alert and status.

XPS Expansion Kit

Enter the product key of the XPS expansion kit.

Storing/Calling of System Settings

The current system settings can be stored, previously stored system settings can be retrieved, and the factory default system settings can be restored. Select [System Settings] - [Storing/Calling of System Settings] from the menu bar and configure each setting.

Restore Factory Defaults

This is used to return the system settings to the factory default settings. If you wish to create a record of the current settings before restoring the factory default settings, print the current settings using "List Print (Administrator)" (page 3-61) in the system settings (administrator).

> 🖉 When settings are changed, the changes will take effect after the machine is restarted. To restart the machine see "TURNING THE POWER ON AND OFF" (page 1-13) in "1. BEFORE USING THE MACHINE ".

Store Current Configuration

This is used to store the currently configured system settings. The stored settings will be retained even if the [POWER] key ( ) is turned off. To retrieve the stored settings, use "Restore Configuration" below.

Items not stored
- Network Settings: These are not stored as unexpected settings may cause damage to the network.
- Product Keys: Product Keys are not stored as reissue of keys may be necessary.

Restore Configuration

Use this to restore settings stored with "Store Current Configuration".
The current settings will change to the retrieved settings.

APPENDIX

System Settings Menu (Operation Panel)

System Settings

- Display Contrast
- Total Count → | Job Count | Device Count |
- Default Settings → | Clock Adjust | Keyboard Select |
- List Print (User) → | All Custom Setting List | Printer Test Page |
- Paper Tray Settings → | Tray Settings | Paper Type Registration | Auto Tray Switching | Custom Size Registration (Bypass) |
- USB-Device Check

Entering Administrator's Password

- Energy Save → | Toner Save Mode | Auto Power Shut-Off | Auto Power Shut-Off Timer | Preheat Mode Setting |
- Operation Settings → | Other Settings | ⇒ | Keys Touch Sound | Display Language Setting |
  → | Machine Display Pattern Setting |
- Device Control → | Other Settings | ⇒ | Registration Adjustment | Optimization of a Hard Disk |
- Network Settings → | IPv4 Settings | Enable TCP/IP | Enable EtherTalk | Reset the NIC |
  | IPv6 Settings | Enable NetWare | Enable NetBEUI | Ping Command |
- List Print (Administrator) → | User Infromation Print |
- Security Settings → | SSL Settings | IPsec Settings | IEEE802.1X Setting |
- Product Key
- Storing/Calling of System Settings → | Restore Factory Defaults | Store Current Configuration | Restore Configuration |
- Sharp OSA Settings → | External Account Setting | USB Driver Settings | Animation Play Speed Setting |

System Settings Menu (Web Page)

System Settings

Total Count	Job Count	Device Count

Default Settings	Clock Adjust	Keyboard Select

List Print (User)	All Custom Setting List	Printer Test Page

Paper Tray Settings	Auto Tray Switching	Tray Settings	Custom Size Registration (Bypass)

Paper Type Registration

Printer Condition Settings	Printer Default Settings

PCL Settings
PostScript Settings

Copies	Disable Blank Page Print	Fit To Page
Orientation	Line Thickness	Output
Default Paper Size	2-Sided Print	Quick File
Default Paper Type	Color Mode	
Initial Resolution Setting	N-Up Print	

USB-Device Check

Entering Administrator's Password

Energy Save	Toner Save Mode	Auto Power Shut-Off	Auto Power Shut-Off Timer	Preheat Mode Setting

Operation Settings	Operation Settings

Remote Operation Settings
Soft Keyboard Template Setting

Keys Touch Sound	Disabling of Job Priority Operation	Machine Display Pattern Setting
Auto Clear Setting	Disabling of Bypass Printing	
Message Time Setting	Key Operation Setting	
Machine Display Language Setting	Disabling of Clock Adjustment	

Device Control	Disabling of Duplex	Disabling of Offset	Auto Paper Selection Setting
	Disabling of Optional Paper Feed Unit	Disabling of Stapler	Fusing Control Settings
	Disabling of Tray Settings	Disabling of Color Mode	Color Adjustments

Printer Settings	Default Settings

Prohibit Notice Page Printing	Print Density Level	Job Spool Queuing
Prohibit Test Page Printing	CMYK Exposure Adjustment	
A4/Letter Size Auto Change	Bypass Tray Settings	

Interface Settings

Hexadecimal Dump Mode	USB Port Emulation Switching	Port Switching Method
I/O Timeout	Enable Network Port	
Enable USB Port	Network Port Emulation Switching	

Print Hold Settings	Default Mode Settings	Administrator Authority Setting	Automatic Deletion of File Settings
	Sort Method Setting	Batch Print Settings	

List Print (Administrator)	Administrator Settings List	Web Settings List

Sharp OSA Settings	Animation Play Speed Setting

Enable/Disable Settings

Product Key

Storing/Calling of System Settings	Restore Factory Defaults	Store Current Configuration	Restore Configuration

CHAPTER 4
TROUBLESHOOTING

This chapter provides solutions to possible problems in a question and answer format. Locate the question that relates to your problem and use the answer to help correct the situation. If you are unable to solve a problem using this manual, please contact your dealer or nearest SHARP Service Department.

System settings or Web pages
System settings are indicated in the "Solutions" column as shown below. In some cases a problem may be solved by enabling the indicated system setting or Web pages.
Example:
→ System Settings (Administrator) > "Energy Save" > "Toner Save Mode" > "Print" > ☑
This is an abbreviated description of the procedure for selecting the setting. ">" indicates the setting sequence and ☑ indicates the state of the setting after it has been enabled. Use these descriptions as a quick manual to help you configure the settings. When "(Web page only)" is indicated, the item being described can only be set in the Web page; it cannot be set on the machine.

REMOVING MISFEEDS

This section explains what to do when a paper misfeed occurs in the machine.

⚠ **Caution**

**The fusing unit is hot. Take care not to burn yourself when removing a misfeed.**

✎ • When removing misfed paper, do not touch or damage the transfer belt.
  • Carefully pull the paper out without tearing it.
  • A misfeed may have occurred inside the machine. Check carefully and remove the misfeed.
  • If the paper tears, be sure to remove all pieces from the machine.

Fusing unit

Transfer belt
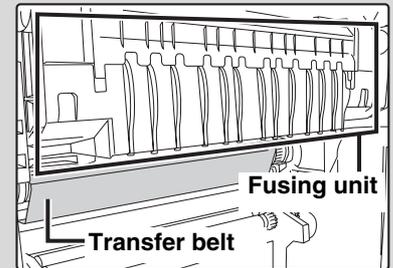
REMOVING MISFEEDS

When a paper misfeed occurs, the message "A misfeed has occurred." will appear in the display and printing will stop. In this event, select the [Information] key in the display. When the key is selected, instructions for removing the misfeed will appear. Follow the instructions. When the misfeed is cleared, the message will automatically clear.

The approximate locations of possible misfeeds are indicated by blinking ▼ marks as shown below.

misfeed location
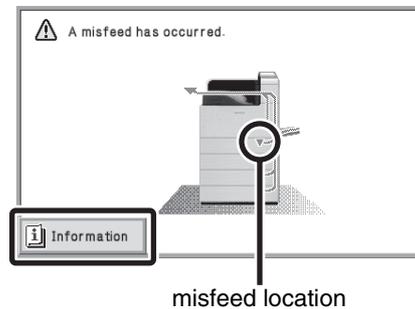
✎ • While the message appears, printing cannot be resumed.
  • If the message does not clear even after the misfeed has been removed, the causes below are possible. Check once again.
    - The misfeed was not correctly removed.
    - A torn piece of paper remains in the machine.
    - A cover or unit that was opened or moved to remove the misfeed was not returned to its original position.

HOW TO REMOVE MISFEEDS

If you require more information when reading the instructions in the display, see the paper misfeed illustrations below.
Refer to the illustration below and then go to the appropriate illustration (1 to 9) for your situation.
☞ (1)-(3): page 4-3, (4)-(8): page 4-4, (9): page 4-5

> When removing a misfeed or closing a cover, tray, or the finisher, take care that your fingers do not become pinched.
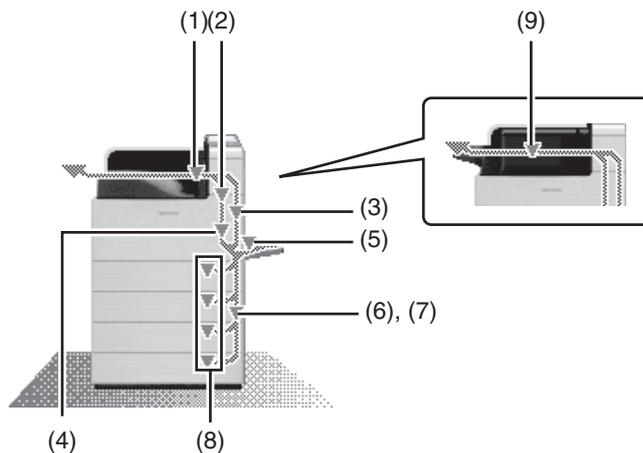

(1) Paper misfeed in the output area
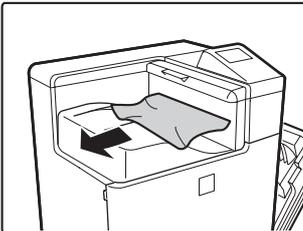
Remove the misfed paper.

(2) Paper misfeed in the fusing unit
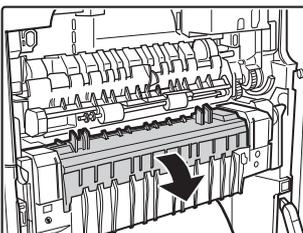
If a paper misfeed has occurred inside the fusing unit, press down on the green part, open the fusing unit, and remove the paper.
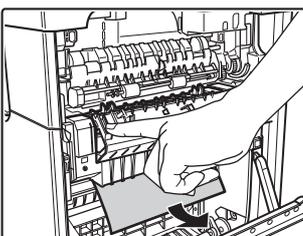
⚠ **Caution**

- **The fusing unit area is hot. Take care not to burn yourself. (Do not touch any metal parts.)**

- **When the fusing unit is tilted down toward you, projections come out in the middle. Do not touch the projections. These can be a cause of human injury or machine failure.**

> Unfused toner may remain on the paper that is removed. Take care that it does not soil your hands or clothing.

(3) Paper misfeed in the transport area
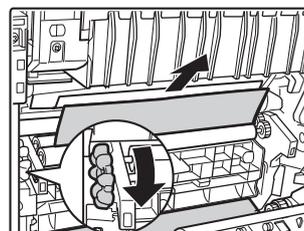
When the rotate knob is turned in the direction of the arrow, paper comes out for above.

(4) Paper misfeed in the reversing unit
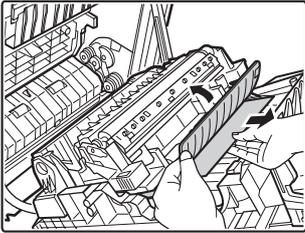
Open the right side cover, open the paper conveyor cover, and remove the paper.
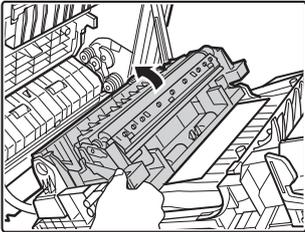
If the misfeed is not in the above location, grasp the handle on the secondary transfer roller unit, slowly open the unit, and remove the paper.
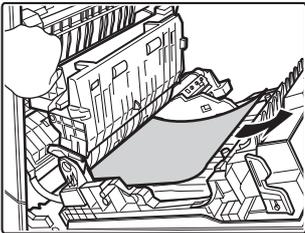
When opening the paper reversing section, open slowly and gently. Forcing the section open may cause the secondary transfer roller unit to detach, resulting in failure.

(5) Paper misfeed in the bypass tray
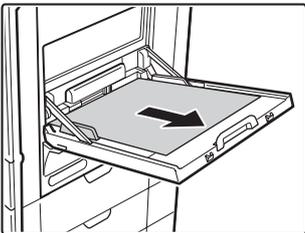
Remove the misfed paper.

(6) Paper misfeed in tray 1 (side)
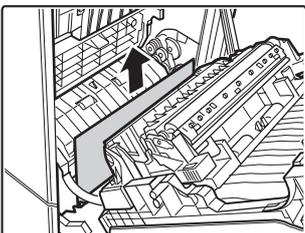
Open the right side cover and remove the misfed paper.

(7) Paper misfeed in tray 2 to tray 4 (side)
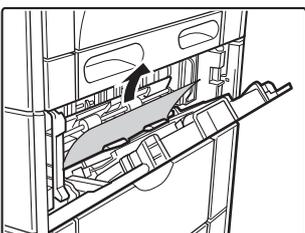
The misfeed may have occurred inside the machine. Check carefully and remove it.

(8) Paper misfeed in tray 1 to tray 4 (in the tray)
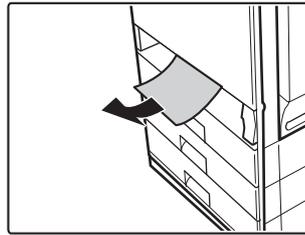
When a paper gets twisted to the roller, remove the tray and remove the misfed paper.

When pulling out a tray, be sure to open the right cover and check for a paper misfeed. If a tray is pulled out when there is a misfeed, the paper will tear and a torn piece may remain in the machine, making it more difficult to remove the misfed paper. To open the right cover and check for a misfeed, follow the procedure in (6) Paper misfeed in tray 1 (side) or (7) Paper misfeed in tray 2 to tray 4 (side).

4-4

(9) Paper misfeed in the finisher
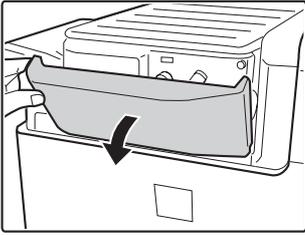
Open the front cover.
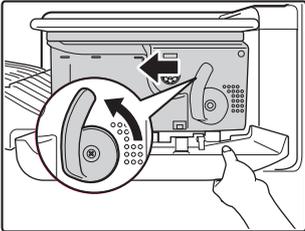
While pressing the lever over to the left, slide the finisher to the left until it stops.
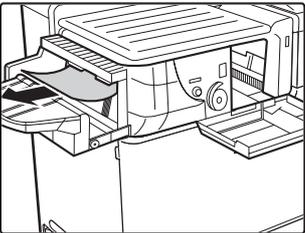
Remove the misfed paper.
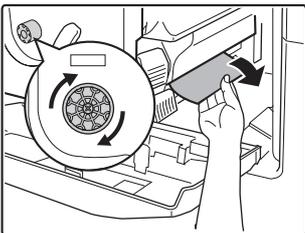
Turn roller rotating knob in the direction of the arrow to remove the misfed paper.
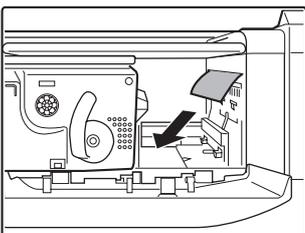
Make sure that there is no misfed paper in the machine.

4-5

REMOVING STAPLE JAMS

Follow the steps below to remove a staple jam.

FINISHER

⚠️ **Caution**

Take care that a bent staple does not hurt you.

1
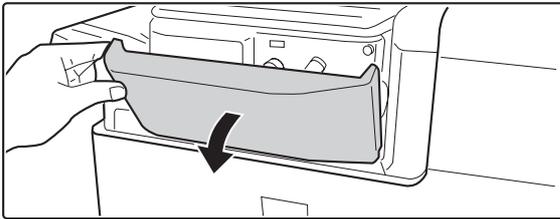
Open the cover.

2
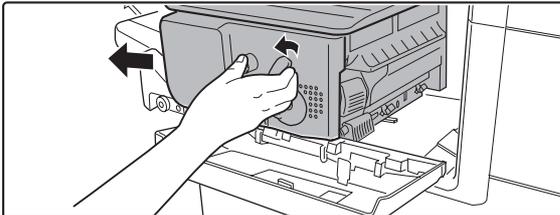
While pressing the lever over to the left, slide the finisher to the left until it stops.

Gently slide the finisher until it stops.

3
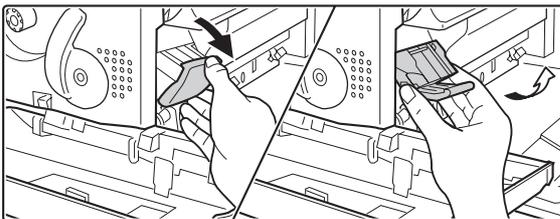
Lower the staple case release lever and remove the staple case.

Pull the staple case out to the right.

4
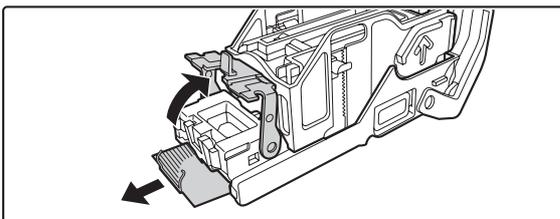
Raise the lever at the front end of the staple case and remove the jammed staple.

Remove the leading staple if it is bent. If bent staples remain, a staple jam will occur again.

5
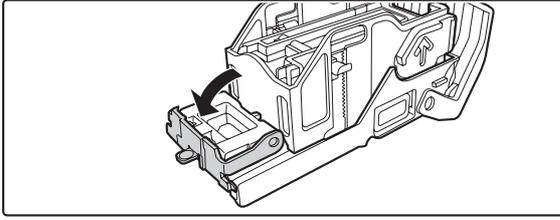
Lower the lever at the front end of the staple case.

6

Replace the staple case.

Push the staple case in until it clicks into place.

7

Slide the finisher back to the right.

Gently slide the finisher back to the right until it locks into its original position.

8

Close the cover.

PRINTING

- If you cannot find the item that you are looking for in the above table of contents, see "" (page 4-15).
- If you are unable to solve a problem using the solutions in this manual, switch off the [POWER] key (⏻) and the main power switch. Wait at least 10 seconds, and then switch on the main power switch and the [POWER] key (⏻) in that order.
  Caution:
  When the DATA indicator is lit or blinking, do not switch off the main power switch or unplug the power plug. This may damage the hard drive or cause the data being stored or received to be lost.

PROBLEMS RELATED TO PRINTING OPERATION

Problem	Point to check	Solution
Printing does not take place.	Is your computer connected correctly to the machine?	Make sure that the cable is connected securely to the LAN connector or the USB connector on your computer and the machine. If you are on a network, check the connections at the hub as well. ☞ 1. BEFORE USING THE MACHINE "SIDE AND BACK" (page 1-6)
	Is the machine connected to the same network (LAN, etc.) as your computer?	The machine must be connected to the same network as your computer. If you do not know which network the machine is connected to, ask the network administrator.
	Is the IP address selected correctly? (Windows)	If the machine does not have a permanent IP address (the machine receives an IP address from a DHCP server), printing will not be possible if the IP address changes. Print the "All Custom Setting List" in the system settings and check the IP address of the machine. If the IP address has changed, change the port setting in the printer driver. → System Settings > "List Print (User)" > "All Custom Setting List" ☞ Software Setup Guide If the IP address changes frequently, it is recommended that a permanent IP address be assigned to the machine. → System Settings (Administrator) > "Network Settings"
	Are you using a printer port created using Standard TCP/IP Port? (Windows 2000/XP/Server 2003/Vista/Server 2008/7)	When a port created with Standard TCP/IP Port in Windows is used and the [SNMP Status Enabled] checkbox is ☑, it may not be possible to print correctly. Change the [SNMP Status Enabled] checkbox to ☐. ☞ Software Setup Guide
	Is "Connect via" set to [Ethernet] for AppleTalk? (Mac OS 9.0-9.2.2)	Open [AppleTalk] from the [Control Panels] and make sure that [Ethernet] is selected in the "Connect via" menu. Printing is not possible if [Ethernet] is not selected.
	Is your computer in an unstable state?	Printing is sometimes not possible when you run multiple applications at once or there is insufficient memory or hard drive space. Restart your computer.
	Is the machine specified correctly in the software application that you are using for printing?	Make sure that the printer driver of the machine is selected in the Print window of the application. If the printer driver does not appear in the list of available printer drivers, it may not be installed correctly. Remove the printer driver and then install it once again. ☞ Software Setup Guide
	Are the network connection devices operating normally?	Make sure that the routers and other network connection devices are operating correctly. If a device is not powered on or is in an error state, see the manual of the device to correct the problem.

Problem	Point to check	Solution
Printing does not take place.	Is the I/O timeout setting too short?	If the I/O timeout setting is too short, errors may occur while writing to the printer. Ask the administrator of the machine to configure an appropriate time in "I/O Timeout". → System Settings (Administrator) (Web page only)> "Printer Settings" > "Interface Settings" > "I/O Timeout"
	Was a Notice Page printed?	A Notice Page will be printed to indicate the cause of the problem if a print job cannot be performed as specified and the cause is not shown in the display. Read the printed page and take appropriate action. For example, a notice page will be printed in the following situations. • The print job is too large to fit in memory. • A function that has been prohibited by the administrator is specified. By factory default, Notice Pages are not printed.
	Have functions been disabled by the administrator?	When user authentication is enabled, the functions that you can use may be restricted in your user settings. Check with your administrator.

Color printing does not take place.	Is the color mode set to "Color"?	Select "Automatic" or "Color" for the color mode setting. The color mode setting is configured as follows:
		Windows:
		  On the [Color] tab of the printer driver.
		Macintosh:
		  In the [Color] menu of the print window.
		In Windows, [Black and White Print] can also be selected on the [Main] tab of the printer driver. If you wish to print in color, make sure that the [Black and White Print] checkbox on the [Main] tab is not selected ☐ .

	Have functions been disabled by the administrator?	When user authentication is enabled, the functions that you can use may be restricted in your user settings. Check with your administrator.
Two-sided printing does not take place.	Does the paper type setting of the selected tray specify a type of paper that cannot be used for two-sided printing?	Check "Tray Settings" in the system settings. If the [Disable Duplex] checkbox is selected ☑ , two-sided printing using that tray will not be possible. Change the paper type setting to a type that can be used for two-sided printing. → System Settings > "Paper Tray Settings" > "Tray Settings" > "Change"
	Are you using a special size or type of paper?	For the paper types and sizes that can be used for two-sided printing, see "SPECIFICATIONS" in the Safety Guide.
	Have functions been disabled by the administrator?	Some functions may have been disabled in the system settings (administrator). Check with your administrator. When user authentication is enabled, the functions that you can use may be restricted in your user settings. Check with your administrator.

Problem	Point to check	Solution
Direct printing of a file in a shared folder on a computer is not possible.	Is "IPsec Settings" enabled on the machine?	When "IPsec Settings" is enabled in the system settings (administrator), direct printing of a file in a shared folder may not be possible in some computer environments. For information about "IPsec settings", consult your administrator. → System Settings (Administrator) > "Security Settings" > "IPsec Settings"
A tray, finisher, or other peripheral device installed on the machine cannot be used.	Have the peripheral devices that are installed on the machine been configured in the printer driver?	Open the printer properties and click the [Auto Configuration] button on the [Configuration] tab. (Windows) If auto configuration cannot be executed, see the Software Setup Guide.

PROBLEMS RELATED TO PRINT RESULTS

Problem	Point to check	Solution
The image is grainy.	Are the printer driver settings appropriate for the print job?	When selecting print settings, you can set the print mode to [Normal], [High Quality], or [Fine]. When you need a very clear image, select [Fine]. (The [Fine] mode cannot be selected when using the PCL5c printer driver.) Windows: The resolution setting is selected in the [Advanced] tab of the printer driver properties window. Macintosh: Select the resolution in the [Advanced] menu of the print window. (In Mac OS v10.5 and 10.6, select the resolution on the [Color] menu in the print window.)
	Have you selected color settings appropriate for the print job?	Select color settings appropriate for the print job. Windows: Select the appropriate document type in [Image Type] on the [Color] tab of the printer driver. Advanced color settings can be selected in the [Advanced Color]* button. Macintosh: Select the appropriate document type in [Image Type] on the [Color] menu of the printer driver. Advanced color settings can be selected in the [Advanced Color]* button. (In Mac OS X v10.5 to 10.5.8 and 10.6, in the [Advanced Color] tab.) * When adjusting detailed color management settings such as "Output Profile", select "Custom" from "Image Type" and then select the desired setting from "Advanced Color".
The image is too light or too dark.	Does the image (particularly a photo) need correction? (Windows)	Brightness and contrast can be corrected by performing [Color Adjustment] on the [Color] tab of the printer driver. These settings can be used for simple corrections when you do not have image editing software installed on your computer.

Problem	Point to check	Solution
Colors are off.	Did you perform "Registration Adjustment"?	Ask your administrator to perform "Registration Adjustment". If the colors are out of position in the printed output of a color print job, "Registration Adjustment" can be used to adjust the print position of each color. → System Settings (Administrator) > "Device Control" > "Registration Adjustment" If the color gradation is off, perform "Color Adjustments". → System Settings (Administrator) (Web page only) > "Device Control" > "Color Adjustments"
Text and lines are faint and difficult to see.	Was color data printed in black and white? (Windows)	When color text and lines are printed in black and white, they may become faint and difficult to see. To have color text or lines (areas) that are faint converted to black, select [Text To Black] or [Vector To Black] on the [Color] tab of the printer driver. (Raster data such as bitmap images cannot be adjusted.)

Part of the image is cut off.	Does the paper size specified by the job match the size of paper loaded in the tray?	Make sure that the paper size setting matches the size of paper loaded in the tray.
		The paper size setting is selected as follows:
		Windows:
		    On the [Paper] tab of the printer driver.
		    If [Fit to Paper Size] is selected, check the loaded paper and the paper size setting.
		Macintosh:
		    In the [Page Setup] menu.

	Is the print orientation setting (portrait or landscape) correct?	Set the print orientation to match the image. The print orientation is selected as follows: Windows: On the [Main] tab of the printer driver. Macintosh: In the [Page Setup] menu.
	Are the margins set correctly in the layout settings of the application?	If the edge of the image extends outside the printable area of the machine, the edge will be cut off. Select an appropriate paper size and margins in the layout settings of the application.

The image is upside down.	Are you using a type of paper (punch paper, etc.) that can only be loaded in a fixed orientation?	When the image size and paper size are the same but the orientations are different, the orientation of the image is automatically rotated to match the paper. However, when the paper can only be loaded in a fixed orientation, this may result in the image being printed upside down. In this event, rotate the image 180 degrees before printing.
		The 180 degree rotation setting is selected as follows:
		Windows:
		    On the [Main] tab of the printer driver.
		Macintosh
		    On the [Page Setup] menu. (Landscape orientation only.)
		    (In Mac OS 9.0 to 9.2.2, in the [PostScript Options] menu of the [Page Setup] menu.)

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Problem	Point to check	Solution
The image is upside down.	Is the correct binding position selected for two-sided printing?	When two-sided printing is performed, every other page is printed upside down when tablet binding is selected for the binding position. Be sure to set the appropriate binding position. The binding position is selected as follows: Windows: On the [Main] tab of the printer driver. Macintosh: In the [Layout] menu of the print window. (In Mac OS 9.0 to 9.2.2, in [Output/Document Style].)
Many nonsense characters are printed.	Is your computer or the machine in an unstable state?	If little free space remains in the memory or hard drive of your computer, or many jobs have been spooled on the machine and it has little free memory remaining, printed text may turn into nonsense characters. In this situation, cancel printing, restart your computer and the machine, and try printing again. To cancel printing Windows: Double-click the printer icon that appears at the lower right of the task bar and click "Cancel All Documents" (or "Purge Print Documents") in the [Printer] menu. Macintosh: Double-click the name of the machine in the printer list, select the job that you wish to delete, and delete it. (In Mac OS 9.0 to 9.2.2, double-click the printer icon on the desktop, select the print job that you wish to delete, and delete it.) At the machine: Press the [JOB STATUS] key on the operation panel, select the [Print Job] tab to change the screen, select the key of the print job that you wish to delete, and select the [Stop/Delete] key. A message appears to confirm the cancelation. Select the [Yes] key. If nonsense characters are still printed after restarting, ask your administrator to lengthen the timeout setting of "I/O Timeout" in the system settings (administrator). → System Settings (Administrator) (Web page only) > "Printer Settings" > "Interface Settings" > "I/O Timeout" If nonsense characters are still printed after taking the above measures, remove and then reinstall the printer driver.

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PROBLEMS RELATED TO FILING

Problem	Point to check	Solution
Retention does not take place.	Did you select retention settings in the printer driver?	In print mode, enable retention on the [Job Handling] tab of the printer driver.
A filed data can not be printed.	Have functions been disabled by the administrator?	Some functions may have been disabled in the system settings (administrator). Check with your administrator. When user authentication is enabled, the functions that you can use may be restricted in your user settings. Check with your administrator.

PROBLEMS RELATED TO FILE MANAGEMENT

Problem	Point to check	Solution
A stored file has disappeared.	Did you select the [Print and Delete the Data] key to print a stored file?	A file that is printed using the [Print and Delete the Data] key is automatically deleted after being printed. To print a file without deleting it, use the [Print and Save the Data] key. The file property can be set to "Protect" to prevent the file from being easily deleted. Click "Document Operations (Web page only)", and then click a file name. → "Property" > "File Property"
	Has automatic deletion of retention files been enabled?	When "Automatic Deletion of File Settings" is enabled in the system settings (administrator), the files in the specified folders are periodically deleted. (Even when the file property is "Confidential" or "Protect", the file may be deleted.) If files that you need have been deleted, consult the administrator of the machine. → System Settings (Administrator) (Web page only) > "Print Hold Setting" > "Automatic Deletion of File Settings"
A file cannot be deleted.	Is the property of the file set to [Protect]?	A file cannot be deleted when its property is set to [Protect]. Change the property to [Sharing] and then delete the file. Click "Document Operations (Web page only)", and then click a file name. → "Property" > "File Property"
A confidential file or confidential folder cannot be opened.	Did you enter the wrong password?	If you cannot remember the password, it is possible to change the file or folder password to a new password in the system settings (administrator). Ask your administrator.
A file name cannot be stored or changed.	Does the name include characters that cannot be used in a file name?	The following characters cannot be used in a file name: \ ? / " ; : , < > ! * & # |

GENERAL PROBLEMS

If you are unable to solve a problem using the solutions in this manual, switch off the [POWER] key ( ) and the main power switch. Wait at least 10 seconds, and then switch on the main power switch and the [POWER] key ( ) in that order.

Caution:

When the DATA indicator is lit or blinking, do not switch off the main power switch or unplug the power plug. This may damage the hard drive or cause the data being stored or received to be lost.

PROBLEMS RELATED TO MACHINE OPERATION

Problem	Point to check	Solution
Specified machine functions cannot be used.	Have functions been disabled by the administrator?	Some functions may have been disabled in the "User Control" (Web page only) or system settings (administrator). Check with your administrator. When user authentication is enabled, the functions that you can use and page counts may be restricted in your user settings. Check with your administrator.
The operation panel cannot be used.	Is the main power indicator lit?	If the main power indicator is not lit, make sure that the power plug is firmly inserted in the power outlet, switch the main power switch to the "on" position, and press the [POWER] key ( ) to turn on the power.
	Did you just power on the machine?	After the [POWER] key ( ) is turned on, the machine requires some time to complete warmup operation. During this time functions can be selected, however, a job cannot be run. Wait until a message appears indicating that the machine is ready.
	Is the [POWER SAVE] key ( ) blinking?	Auto Power Shut-Off mode has activated. To return the machine to normal operation, press the [POWER SAVE] key ( ). ☞ 1. BEFORE USING THE MACHINE "[POWER SAVE] KEY" (page 1-14)
	Is a cover open or a device separated from the machine?	A warning message will appear when a cover is open or a device is separated from the machine. Read the message and take appropriate action.
	Did login fail three times in a row?	When "A Warning when Login Fails" is enabled in the "User Control" (Web page only) and login fails 3 times in a row, a warning will be displayed and operation will lock for 5 minutes. After operation unlocks, log in using the correct user information. (If you do not know your user information, contact your administrator.)
	Does a message appear indicating that Auto Login failed?	Auto Login failed due to a problem on the network. Contact your administrator. If you are the administrator, select the [Admin Password] key, log in as an administrator, and temporarily change the auto login settings in the system settings (administrator). (Restore the changed settings to their original state after the network problem has been solved.)

Problem	Point to check	Solution
The operation panel cannot be used.	Does the message "Call for service. Code:xx-xx*." appear in the display? *Letters and numbers appear in xx-xx.	Make sure that the DATA indicator is not blinking or lit and then switch off the [POWER] key (⊚) and the main power switch. Wait at least 10 seconds and then switch the main power switch and the [POWER] key (⊚) back on in that order. If the message still appears after switching the [POWER] key (⊚) and main power switch off and on several times, it is likely that a failure has occurred that requires service. In this event, stop using the machine, unplug the power plug, and contact your dealer or nearest SHARP Service Department. (When contacting your dealer or nearest SHARP Service Department, inform them of the displayed error code.)
Printing is not possible or stops during a job.	Is a tray out of paper?	Add paper as instructed by the message in the display.
	Is the machine out of toner?	When toner runs low, a message will appear to inform you that the toner cartridge must be replaced. To replace the toner cartridge, see "REPLACING THE TONER CARTRIDGES" (page 1-49) in "1. BEFORE USING THE MACHINE".
	Has a paper misfeed occurred?	Remove the misfeed as instructed by the message in the display. ☞ REMOVING MISFEEDS (page 4-2)
	Is the output tray full?	When the output tray becomes full, a detector activates and stops printing. Remove the output from the tray and resume printing.
	Is the toner collection container full?	Replace the toner collection container as instructed by the message in the display. ☞ 1. BEFORE USING THE MACHINE "REPLACING THE TONER COLLECTION CONTAINER" (page 1-52)
	In the Paper Tray Settings of the system settings, are restrictions placed on the trays that can be used in print mode?	Check the Paper Tray Settings and see if checkmarks appear in the checkboxes of print mode (Feeding Approved Job). Functions without a checkmark cannot be used for printing using that tray. → System Settings > "Paper Tray Settings" > "Tray Settings" > "Change" > ☑
The displayed bypass tray paper size is not correct.	Is the bypass tray extension pulled out?	When loading paper in the bypass tray, be sure to pull out the extension to enable the paper size to be detected correctly.

4-17

PROBLEMS RELATED TO PAPER FEEDING AND OUTPUT

Problem	Point to check	Solution
The paper misfeeds.	Is a torn piece of paper remaining in the machine?	Make sure all paper is removed. ☞ REMOVING MISFEEDS (page 4-2)
	Is too much paper loaded in the tray?	Make sure that the stack of paper in the tray is not higher than the indicator line.
	Are multiple sheets feeding at once?	Fan the paper well before loading it.
	Are you using paper that is not within the specifications?	Use SHARP-recommended paper. Using paper that is not supported may result in misfeeds, creases, or smudges. Please use SHARP-recommended paper and label sheets. For paper that is prohibited or not recommended, see "USEABLE PAPER" (page 1-37) in "1. BEFORE USING THE MACHINE".
	Has the paper in the tray absorbed moisture?	If you will not be using paper in a tray for a long time, remove the paper from the tray and store it in a bag in a dark and dry location.
	Are the bypass tray guides adjusted to the width of the paper?	Adjust the bypass tray guides to the width of the paper.
	Is the bypass tray extension pulled out?	When loading a large size of paper, pull out the extension.
	Is the bypass feed roller dirty?	Clean the surface of the bypass feed roller. ☞ 1. BEFORE USING THE MACHINE "CLEANING THE BYPASS FEED ROLLER" (page 1-67)
	Has the correct paper size been set?	If you are using a special size, be sure to specify the paper size. If the size of paper loaded in a tray was changed, be sure to check the paper size setting. →System Settings > "Paper Tray Settings" > "Tray Settings"
	Did you add paper to the bypass tray?	When adding paper, remove any paper remaining in the bypass tray, combine it with the paper to be added, and reload as a single stack. If paper is added without removing the remaining paper, a misfeed may result.

Problem	Point to check	Solution
Paper does not feed from the paper tray.	Is the paper loaded correctly in the paper tray?	Set the guides to the size of the paper. Make sure the height of the paper does not exceed the indicator line.
	In the Paper Tray Settings of the system settings, are restrictions placed on the trays that can be used in print mode?	Check the Paper Tray Settings and see if checkmarks appear in the checkboxes of print mode (Feeding Approved Job). Functions without a checkmark cannot be used for printing using that tray. → System Settings > "Paper Tray Settings" > "Tray Settings" > "Change" > ✔
The image on paper is skewed.	Is too much paper loaded in the bypass tray?	Do not load more than the maximum number of sheets. The maximum number of sheets varies depending on the paper type setting. For more information, see "SPECIFICATIONS" in the Safety Guide.
	Are the bypass tray guides adjusted to the width of the paper?	Adjust the bypass tray guides to the width of the paper.

PROBLEMS RELATED TO QUALITY / PRINT RESULTS

Problem	Point to check	Solution
Lines appear in the printed image.	Is the bypass feed roller dirty?	Clean the surface of the bypass feed roller. ☞ 1. BEFORE USING THE MACHINE "CLEANING THE BYPASS FEED ROLLER" (page 1-67)
Smudges appear on printed output.	Are you using paper that is not within the specifications?	Use SHARP-recommended paper. Using paper that is for other models or special paper that is not supported may result in misfeeds, creases, or smudges. Please use SHARP-recommended paper and label sheets. For details, contact your dealer or nearest SHARP Service Department.
	Are you printing on pre-punched paper?	If the printed image overlaps the punch holes, smudges may appear on the reverse side of the paper following one-sided printing, or on both sides following two-sided printing. Take care that the image does not overlap the punch holes.
	Is the laser unit, the main charger, or the PT charger dirty?	If these units are dirty, smudges appear upon print results. Clean these units periodically. For cleaning, see "CLEANING THE PT CHARGER" (page 1-73) in "1. BEFORE USING THE MACHINE".
	Does a message appear indicating the need for maintenance?	Contact your dealer or nearest SHARP Service Department as soon as possible.

Problem	Point to check	Solution
Toner does not adhere well or creases appear in the paper.	Are you using paper that is not within the specifications?	Use SHARP-recommended paper. Using paper that is for other models or special paper that is not supported may result in misfeeds, creases, or smudges. Please use SHARP-recommended paper and label sheets. For details, contact your dealer or nearest SHARP Service Department.
	Did you set the correct paper type?	Set the correct paper type in the tray settings. Make sure that the following has not occurred: • Heavy paper is being used, but a paper type other than heavy paper is selected in the tray settings. (The image may disappear if rubbed.) • Paper other than heavy paper is being used, but heavy paper is selected in the tray settings. (This may cause creases and misfeeds.) → System Settings > "Paper Tray Settings" > "Tray Settings"
	Is the paper loaded so that printing takes place on the reverse side?	If printing takes place on the wrong side of label sheets or transparency film, the toner may not adhere well and a clear image may not be obtained.
Print quality is poor.	Is "Toner Save Mode" enabled?	When "Toner Save Mode" is enabled, printing takes place using less toner and thus the print result is lighter. Check with your administrator.
Part of the image is cut off.	Has the correct paper size been set?	If you are using a special size, be sure to specify the paper size. If the size of paper loaded in a tray was changed, be sure to check the paper size setting. → System Settings > "Paper Tray Settings" > "Tray Settings"
Printing takes place on the wrong side of the paper.	Is the paper loaded with the print side facing in the correct direction?	• Trays 1 to 4: Load the paper with the front side facing up*. • Bypass tray: Load the paper with the front side facing down*. * When the paper type is "Pre-Punched", "Pre-Printed" or "Letter Head", load the paper in the opposite way. (Except when "Disabling of Duplex" is enabled in the system settings (administrator). For the current setting, check with your administrator.)
A cover or insert is not printed on the specified paper.	Has the paper type been set correctly?	If the paper type set for the cover or insert is not the same as the paper type set for the tray, paper will be fed from a different tray. Set the correct paper type for the tray that contains the paper specified for the cover or insert. → System Settings > "Paper Tray Settings" > "Tray Settings"

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PROBLEMS RELATED TO PERIPHERAL DEVICES

Problem	Point to check	Solution
The connected USB device cannot be used.	Is the USB device compatible with the machine?	Ask your dealer if the device is compatible with the machine.
	Is the connected USB device recognized correctly?	Use "USB-Device Check" in the system settings to check whether or not the device can be recognized. ➔ System Settings > "USB-Device Check" If it is not recognized, connect it once again.
The connected USB memory cannot be used.	Is the format of the USB memory FAT32?	If the format of the USB memory is other than FAT32, use your computer to change the format to FAT32.
	Are you using a USB memory with a capacity of more than 32 GB?	Use a 32 GB or less USB memory.
The finisher does not operate.	Does a message appear indicating that you need to remove paper from the stapler compiler?	Remove all remaining paper from the stapler compiler.
	Does the following message appear in the display? "Please refer to operation manual. Code:xx-xx*. Finisher trouble." *Letters and numbers appear in xx-xx.	Check the connection cable. Remove and then firmly reinsert the connection cable, and restart the machine.
Stapling does not take place.	Does a message appear instructing you to check the staple unit?	Remove jammed staples. ☞ "REMOVING STAPLE JAMS" (page 4-6)
	Does a message appear instructing you to add staples?	Replace the staple cartridge. Do not forget to replace the staple case. ☞ "REMOVING STAPLE JAMS" (page 4-6)
	Are there more sheets than can be stapled at once?	For the maximum number of sheets that can be stapled, see "SPECIFICATIONS" in the Safety Guide.
	Is a paper size that cannot be stapled included in the print job?	For the paper sizes that can be stapled, see "SPECIFICATIONS" in the Safety Guide.
	Is the paper type setting of the tray selected in the printer driver set to a paper type that cannot be stapled?	Check the paper type settings in the machine and select a tray that has paper that can be used for stapling*. Click the [Tray Status] button in "Paper Selection" on the [Paper] tab of the printer properties window and check the paper type setting of each tray. * Stapling is not possible on labels, transparency film, or envelopes. In addition, if "Disable Staple" is selected in the user type, stapling will not be possible.
	Have functions been disabled by the administrator?	Some functions may have been disabled in the "User Control" (Web page only) or system settings (administrator). Check with your administrator.
Output does not collect neatly in the output tray of the finisher.	Is the paper curled?	It may help to turn the paper over in the paper tray.

Problem	Point to check	Solution
Stapled output does not collect neatly.	Is the paper curled?	It may help to turn the paper over in the paper tray.

OTHER PROBLEMS

Problem	Point to check	Solution
Preview images or thumbnail images do not appear.	Are there a number of jobs waiting to be executed?	Wait until several of the jobs have been executed.
The display screen is difficult to view.	Is the display contrast properly adjusted?	Adjust the display contrast with "Display Contrast" in the system settings.
You were logged out without having performed logout yourself.	Did Auto Clear activate?	When user authentication is used, the currently logged in user will be automatically logged out if Auto Clear activates. Log in again. If you are the administrator, you can change the time setting of Auto Clear or disable Auto Clear in "Auto Clear Setting". →System Settings (Administrator) (Web page only) > "Operation Settings" > "Other Settings" > "Auto Clear Setting"
You forgot the administrator password.	Was the administrator password changed from the factory default setting?	Contact your dealer or nearest SHARP Service Department. For the factory default administrator password, see "TO THE ADMINISTRATOR OF THE MACHINE" in the Safety Guide. After changing the password, take special care to remember it.
The actuator came off (when a finisher is not installed)	When removing printed output, do you forcefully lift the paper up or fold the paper?	While removing the output, if you forcibly pull up or fold the output, the actuator may come off. If the actuator comes off, follow the steps below to reattach it. **(1) Lift the mount for the actuator with your finger.** Hold the mount with your finger. **(2) Insert in the direction of the arrow as far as the actuator will go.** Do not forcibly press the actuator into the mount. The actuator may break. Actuator **Orientation of the actuator** Top side — When attaching the actuator, make sure it is attached with the top side up.

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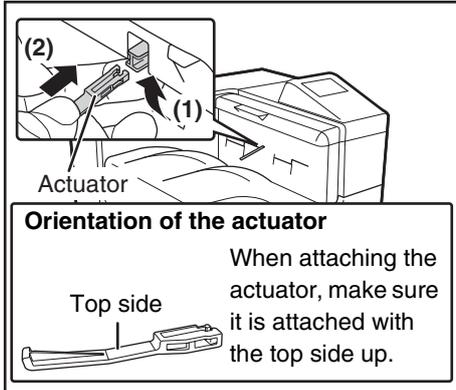
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